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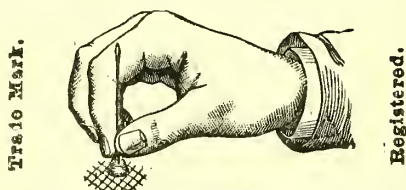
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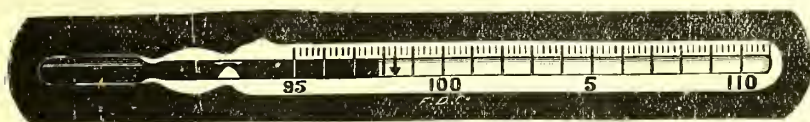


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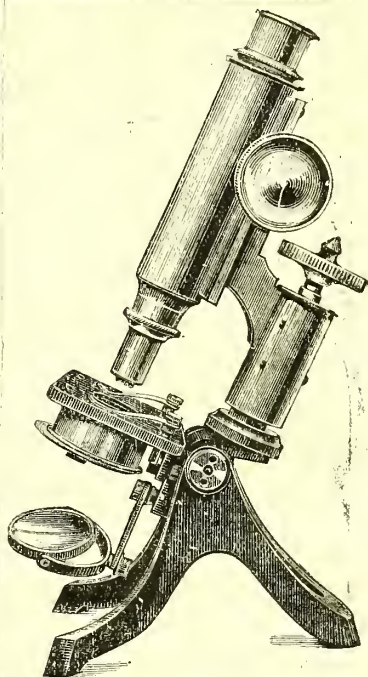
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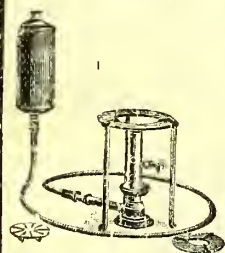
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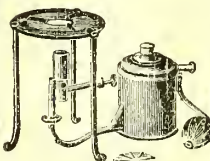
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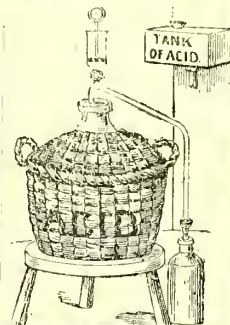


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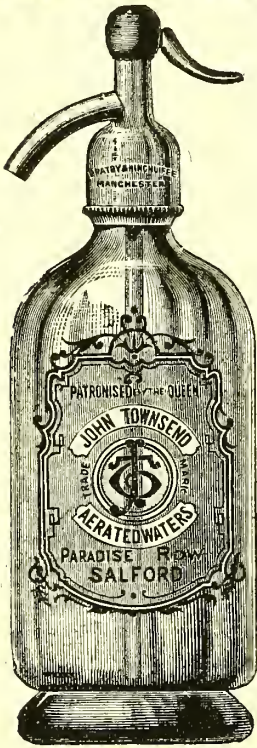
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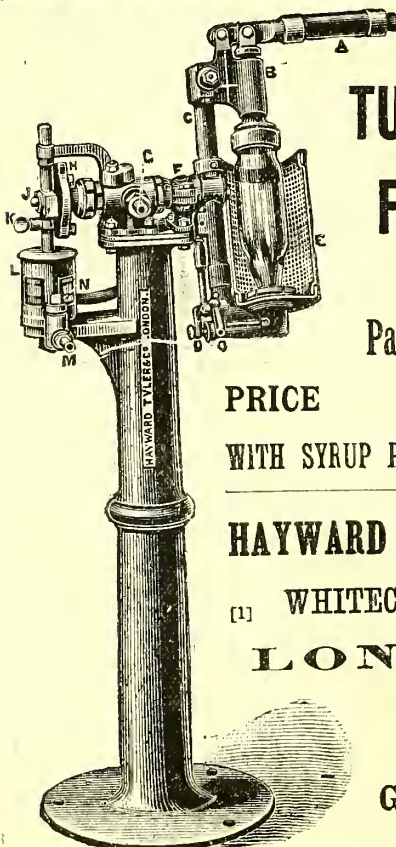
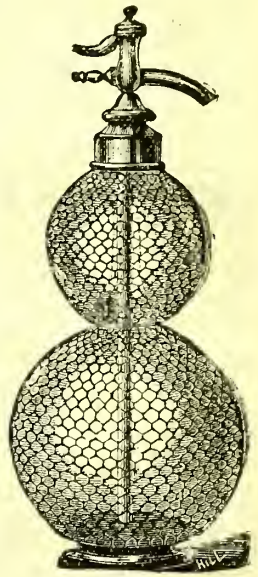
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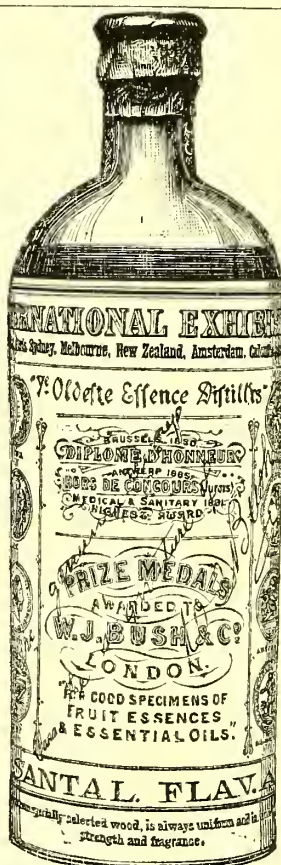
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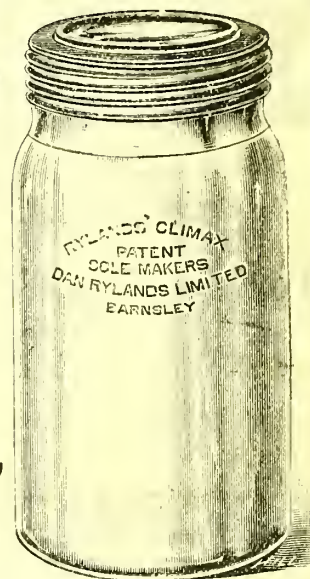
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For sale, 130 well-tryed recipes, neatly copied in book, post, 1s. 6d. Tully, Chemist, Hastings. Valuable recipe for digestive elixir, has a large sale as a proprietary in the North. Post free 1s. 1d., from "Analyst," 144 Desborough Road, High Wycombe.

### Educational.

Minor books for sale; list. Anderson, Thirst. Microscope, 2l.; another, 30s.; good condition. W. G. Burge, 25 Lower William Street, St. John's Wood.

"Theory and Practice Obstetrics," 5 vols., new bound (Cazeau and Tarnier); cost 2l. 2s.; what offers? Thorp & Co., Chemists, Oldham

### Drugs and Chemicals.

One cwt. finest English honey. Appleton, Chemist, Selby.

Nine lbs. gum. opii ture. opt., at 12s. per lb.; 5 lbs. hyd. ox. flav., 2s. 3d. per lb.; 2 lbs. calc. hypophos., 3s. per lb.; 10 1-oz. bottles morphia mar., 5s. 3d.; 3 1-oz. bottles morphia acet., 5s. 6d.; 4 lbs. bismuth carb., 7s. per lb.; 5 1/2 lbs. bismuth subnit., 6s. 9d. per lb.; 3 original bottles Hoskiss's ol. menth. pip., 11s. 6d. per lb.; 3 doz. 1s. 6d. tins Wilson's food, 6s. 6d. per doz. "Chemist," 6 Prebend Gardens, Chiswick, W.

### Shop Fittings.

Dispensing-cabinet (Maw's), with bottles complete, for sale; low price. Clark, 34 Colville Road, Bayswater.

Mahogany cigar-case, 6 divisions, case at back, as Maw's fig. 19; equal to new; 25s. Goodridge, Chemist, Andover.

For sale, cheap, bent and upright showcase combined; mahogany and plate glass, silvered door to open at back, movable shelves. Sketch and dimensions on application to A. Lowe, Chemist, Norwich.

Plate-glass shelves, cheap; 1,000 decems flask, 50 c.c. burette, 3 retorts, 25 c.c. burette (glass cock) with patent holder and stand complete, 9s.; copper drying-oven, 8s.; Liebig's condenser (large), 10s.; shop-rounds, all sizes, 6s. doz.; syrup-bottles, 6d. each; 2 5-gall. carboys, latest shape; 10s. each. Wood, Old Town Hall, Hackney.

Large mahogany desk, with enclosure, 17. 5s.; counter (10 ft. long) with glass-cased front, fitted with drawers, 4l. 10s.; handsome mahogany dispensing-screen, plate-glass front, labelled "Prescriptions," 2l. 10s.; 13 ft. run of drawers by 3 ft. high, containing 130 drawers, 5l.; handsome show- jar on ornamental bracket pedestal, 15s. Wood, Old Town Hall, Hackney.

Shop-fittings, second-hand.—12 ft. run of mahogany-fronted drawers, with glass labels and glass knobs, shelving and lockers complete; 11 ft. 3 in. mahogany counter, with plate-glass front; 6 ft. return-end counter, with dispensing-screen, with mirror centre on top of same; 6 ft. mahogany and glass wall-case; 6 ft. bent plate-glass counter-case; desk, with glass case in front, window enclosure; 3 carboys on mahogany stands; lilac ointment-jars; price 60l. the lot; they must be sold, together or separate. Philip Josephs, 54 Old Street, Goswell Road, London, E.C.

### Miscellaneous.

One hundred gross 6-oz. bottles, or less quantity, at 6s. a gross. Griffith, Chichester.

Six doz. 4-gall. tin bottles; 8 doz. 6-gall. iron bots. and drums. Pollard, Halifax.

One ton dry soap, in 1/2-lb. linen bags, 15s. cwt. Thorp & Co., Chemists, Oldham.

Condensed milk, 28 lbs., in 1/2, 1/3, and 1 lb. bottles, lot 7s. 6d. Thorp & Co., Chemists, Oldham.

For sale, pill-machine; perfect order; special improvements: 1 1/2 gr. pills; pedal movement; 10l. Hooper, 134 Upper Thames Street.

Fifty morphia hydrochlor., 5s. 3d. per oz.; 5 fl. oz. otto rose virgin, 25s. oz., sample 6d.; 7-lb. panels only Chemist's red sealing-wax, 6d. lb. Hugh Edgson, Hornsey, N.

Very cheap, about 3 gross of pint and quart syphon vases, best glass; pints, 2s. doz.; quarts, 3 doz.; pure tin tops for same, 7s. doz. H., 53 North Street, Brighton.

For sale, 18 glass retorts; 27 receivers; 19 test-glasses, various sizes; 7 pipettes; 8 acid-funnels; glass tubing; 2 fireclay crucibles. "Chemist," 3 Forest Road, Southport.

Pharmaceutical Journal, seven years from 1883- lot 20s.; Chemist and Druggist, four years from 1889, lot 12s., all clean and complete; 4 vols. Withering's "British Plants," cost 4l. 4s., 10s.; 8 silver catheters. Hartley, Leek.

One guinea "Zoka" hand-camera, good as new complete, 10s. 6d.; 1 landscape lens, half-plate, 7 x 5, rotating diaphragm, by Perkin, Son & Rayment, as new, 1l. 1s. 3/75, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

Mineral-water plant, complete (American system), comprising soda-water machine, 2 copper cylinders (15-gall.), copper generator (10-gall.), filling-machine for patent bottles-ditto for corks, filter, 25-gall. copper boiler in portable furnace, syrup-pans, all necessary piping, wash-tub, rinser, acid-syphon, about 6 gross Cold's bottles (unmarked), &c., &c.; everything required to start business right off; what offers? J. S. Horsley, Tonbridge.

### WANTED.

Two-gall. swan-neck carboy; Maw's old pattern. Summers, Heckington.

Books for Major, latest editions. G. Kitching, 29 Crescent, Merceambi.

Books for Major exam., latest. Fish, 15 Tipping Street, Fild's Road, Bolton.

Wrought-iron or mahogany pillar, to carry carboy. Read, 90 Victoria Street, S.W.

Fowne's "Organic, Inorganic Chemistry"; latest; state lowest. Burnett, 10 Abbey Road, Torquay.

✱ SHOP FITTERS,  
SHOWCASE  
MAKERS.

✱ NATALI & CO.

40 CRAY'S INN ROAD, HOLBORN,  
LONDON, W.C.

CHEMISTS' SHOP-FITTINGS, SHOWCASES, AND UTENSILS

OF ALL DESCRIPTIONS, NEW AND SECOND-HAND

Chemists commencing, opening Branches, or making alterations, can be fitted throughout immediately, and save 25 per cent. by purchasing from our extensive stock.

TRANSFER AGENCY NOW OPEN. Several good Businesses for Sale and Wanted.

Stock taken, Valuations made, and Sales effected on most reasonable terms.

NO CHARGE for REGISTERING BUSINESS and NO CHARGE to PURCHASERS.

SPONGE IMPORTERS.

M. PETERSON & CO.

(ESTABLISHED 1870),

75 ST. ANNE STREET, LIVERPOOL.

FOR HOME, FOREIGN & COLONIAL MARKETS.

SPECIAL LINE—FEEDING BOTTLES.

GREEN GLASS, Plain Neck, best Black Rubber Fittings 20/6 per gross.

WHITE GLASS, Screw Neck, best Black Rubber Fittings 27/11 "

VEGETABLE IVORY RING SOOTHERS .. 8/6 "

Terms—Net Cash with order, packages free, delivered to rail or wharf, London.

SURREY PACKING CO., 57 New Kent Road, LONDON, S.E.

WILLIAM BURTON & SONS, BETHNAL GREEN, LONDON.

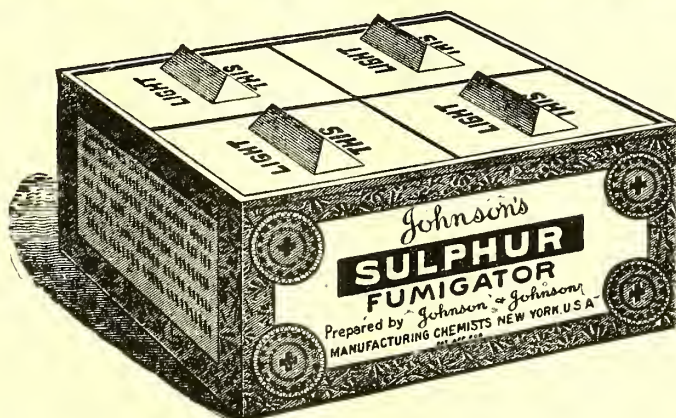
Hydrogen Peroxide, Indigo Extract, Soluble Indigo Powder, Orchil, Cudbear, Logwood Extract, Fustic Extract, Aniline Dyes, Fine Lakes for Lithographic Inks, Vermilionettes, Drysalteries.

Sole Agents in United Kingdom and Colonies, excepting Canada, for

The New Bleach, SODIUM PEROXIDE (Aluminium Co., Ltd.)



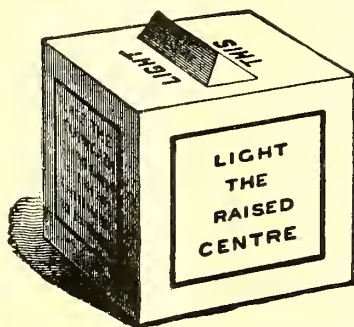
# JOHNSON'S SULPHUR FUMIGATOR



FOR FUMIGATING INFECTED ROOMS AFTER  
**Cholera, Diphtheria, Typhoid Fever, Smallpox, Scarlet  
Fever, and other Contagious Diseases.**

Destroys noxious vapours from sewers, &c. By the use of these Fumigators a safe and convenient mode of burning sulphur indoors is provided. One Fumigator is sufficient for an ordinary sized room.

For small rooms or cupboards, closets, &c., one of the cubes, as below,



Can be removed from the box of four and burnt separately.

**JOHNSON'S FUMIGATOR** is put up in a specially prepared FIREPROOF BOX, which will not burn or become red hot like tin or other metal packages.

Packed in neat Show Boxes with folding covers. A showy Counter Article.

CAN BE PROCURED FROM ANY OF THE WHOLESALE HOUSES.

In ordering from Wholesale Trade specify JOHNSON & JOHNSON.

**JOHNSON & JOHNSON, LIM., 12<sup>A</sup> LONG LANE, SMITHFIELD, E.C.**



Unequalled for making Soups,  
Gravies, Hashes, Stews, &c.

**EDWARDS'** <sup>1 lb. makes  
SIX Quarts of  
good SOUP by  
boiling in water  
for 30 minutes.</sup>

**DESICCATED**

Liberal Discount to Retail  
Trade.

Carriage paid on orders of  
£2 net and upwards.

**SOUPS.**

Sole Manufacturers:—

**F. KING & CO., LTD.**

3 to 6 Camomile St., LONDON, E. C.

**"DORINA"** Every Chemist  
is invited to send for  
**FREE FULL-SIZE  
SAMPLE TIN.**

"They possess distinct nutritive  
value."—*The Lancet.*

"We can recommend them to the  
notice of the profession"—*British  
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SUPPLIED TO CHEMISTS

1/2 Tins, 10/6 per dozen.

Wholesale of all Wholesale Houses.

Manufacturer: **H. B CHIBNALL,**  
**HAMMERSMITH, LONDON, W.**

**A REVOLUTION IN TRADE.**

**TOBACCO AND CIGARS, "MIXED PARCELS."**

Every Requisite for the Smoker in One Order.

MINIMUM OF TROUBLE. MAXIMUM OF PROFITS.

Every known Manufacturer's Packet Tobaccos and Cigarettes at their List  
Prices. Foreign Cigars and Tobacconists' Fancy Goods at Importers' Prices.  
Carriage paid on parcels of £2 upwards to any station in the United  
Kingdom.

**SINGLETON & COLE, Limited,**

TOBACCONISTS' FACTORS,

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All Dealers in Tobacco, Cigars, Cigarettes, or Tobacconists' Fancy Goods  
should send P. C. for a copy of our Illustrated Price List. It is simply  
invaluable as a reference and guide to the Trade, and new beginners gather  
much useful information from it, thereby gaining experience and saving  
time and money.

**EIGHT PRIZE MEDALS AWARDED.**

**GOODALL'S  
HOUSEHOLD  
SPECIALITIES.**

**YORKSHIRE RELISH.**

Most Delicious Sauce in the World. Bottles, 6d., 1s., & 2s. each.

**GOODALL'S BAKING POWDER.**

The Best in the World. 1d. Packets; 6d., 1s., 2s., and 5s. Tins.

**GOODALL'S EGG POWDER.**

One 6d. Tin is equal to 25 Eggs. In 1d. Packets; 6d., 1s.,  
and 5s. Tins.

**GOODALL'S CUSTARD POWDER.**

Delicious Custards without Eggs. In Boxes, 2d., 6d., & 1s. each.

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Delicious Blancmange in a Few Minutes. Boxes, 6d. and  
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Best Tonic yet Introduced. Bottles, 6d., 1s., and 2s. each.

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Makes the Best Ginger-Beer. Packets, 3d. and 6d.

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For Painting Stoves, Grates, Iron, Tin, &c. 6d. & 1s. Bottles.

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Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each.

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Make a Delicious and Nutritious Jelly. In 1/2-pint, 1-pint,  
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# PETER TYRER'S SAUCES

WORCESTER, READING, HARVIE, YORKSHIRE, AND "BOROUGH" KETCHUP.

SILVER MEDAL.

		Per gross.	Extra quality.			Per gross.	Extra quality.
1d. Sample Bottles, dozen parcels ..	..	5/3	6/3	1/2 Bottles, flat or round, reputed half-pints ..	..	16/-	26/-
1d. " " 1/2-gross boxes ..	..	5/9	6/9	1 Pint Imperial, round stoppered bottles ..	..	26/-	32/-
1d. " " dozen parcels ..	..	5/6	6/6	12 1/2-Gallon Casks (casks free) ..	each	62/-	62/-
1d. " " 1/2-gross boxes ..	..	7/-	9/-			20/-	32/-

## ROYAL CAFE SAUCE, a Rich Fruity and Exquisite Flavour.

Square Glass Stoppered Bottles, containing nearly 1/2-pint Imperial, 42/- per gross. Sample Bottles at 7/- per gross.

MANUFACTORY — 30 SOUTHALL PLACE, LONG LANE, BOROUGH, LONDON, S.E.  
CHIEF SCOTCH AGENCY — West Nile Street. GLASGOW.

# PASCALL'S GOLDEN MALTEX

PATENTED.

Contains 25% of Allen & Hanburys' Extract of Malt.

A NOVEL CONFECTION.

Delicious Flavour. Brilliant and Attractive Appearance.

**SELLS AT SIGHT.**

Vide Dr. Tanner's Report, and *The Chemist and Druggist*, April 20th.

1/- Bottles, 9/- per dozen; 1-lb. Bottles, 18/- per dozen;  
and in 2-lb. and 4-lb. Bottles, 1/4 per lb.

HANDBILLS POST FREE ON APPLICATION.

OF ALL WHOLESALE HOUSES OR OF THE MANUFACTURER, [1]

JAS. PASCALL, BLACKFRIARS ROAD, LONDON, S.E.



# ROWNTREE'S

# "ELECT" COCOA.

The "MEDICAL PRESS AND CIRCULAR" :-

"Certainly this preparation is of delicate flavour . . . It is perfectly soluble . . . The small quantity required for the immediate production of a cup of excellent cocoa will ensure for the 'Elect Extract' a favourable reception at the hands of persons of weak digestion, and all who prefer this wholesome beverage to tea and coffee."

The "BRITISH MEDICAL JOURNAL" says :-

"Rowntree's Cocoa Extract is one of the best. Its flavour and aroma are good. Cocoa thus prepared is one of the most digestible articles of food."

YORK, ENGLAND



# ROBINSON'S LIEBIG'S BEEF WINE.

Composed of Liebig's Extract of Beef, Extract of Malt, and sound Port Wine.

**REPORT ON BEEF WINES.**

From the results of my Analyses of various Beef Wines I have had occasion to examine, none have equalled as regards strength, purity of ingredients, and (of no less importance) the skilful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. Robinson, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.

WILLIAM ELBORNE, F.C.S., F.L.S.,

Lecturer on Materia Medica in the Owens College, Manchester (Victoria University).

December 15, 1888.

# ROBINSON'S ORANGE WINE.

Specially prepared for Quinine Wine, does not deposit, will keep good in any climate, and well adapted for Export Trade. Supplied in Casks containing 9, 18, 30, 60, or 120 Gallons. Terms on application. [2]

# PHARMACEUTICAL SHERRY WINE.

This Wine is well adapted for Pharmaceutical Preparations, and is the strength ordered by the B.P. Price, in 6-Gallon Casks, 5/6 per gallon; in 2-Gallon Jars, 6/- per gallon, carriage paid. Casks charged 7/6, Jars 2/6, and allowed if returned. Cash or satisfactory reference to accompany orders.

B. ROBINSON, Distiller and Brewer of British Wines, Church St., Pendleton, Manchester.



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GRASSE (Alpes Maritimes), FRANCE.

Neroly, Lavender, Geranium, Orris, Patchouly, Thyme, Rosemary, Spike, Santal, &amp;c.

CONCENTRATED PERFUMES.

CONCRETE ESSENTIAL OILS.

FLOWER POMADES at the highest possible Saturation. ROSE &amp; ORANGE FLOWER WATER, Sweet Almond Oil.

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ESSENTIAL OILS

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## GROSSMITH'S NEW PERFUME.

FACSIMILE OF LABEL.

A HIGH-CLASS  
FLORAL EXTRACT.  
VERY ENTRANCING.Price—1½-oz., 21/-; 3-oz., 40/-;  
6-oz., 80/- per dozen.DEDICATED BY  
GRACIOUS PERMISSION  
TO  
PRINCESS MAY  
(H.R.H. the Duchess of York).

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85 Newgate Street, LONDON.

## OKELL'S ORIGINAL MONA BOUQUET.

(First introduced by the late JOSEPH OKELL.)

Registered Trade Mark, "DOUGLAS PIER."

The most popular and best-selling Perfume in the market.  
Retail Prices, 1/-, 1/9, 3/6, 6/-, 7/6, 10/6 per Bottle.

ALSO 3d. SAMPLE BOTTLES.

Shippers and Wholesale Buyers supplied on the best terms by  
THOMAS WEST, 1185 & 1187 CHESTER ROAD, MANCHESTER.  
STRETFORD.

USED BY ROYALTY.



### IVORINE COMPLEXION CREAM

Removes Wrinkles, Superficial  
Eruptions, Irritation, Inflamed Eyelids;  
Heals Burns, Cuts, Bruises, Insect Bites,  
and is invaluable for Eczema.Highly recommended by "LANCET"  
and Dr. STARTIN.Miss ELLEN TERRY says: "Nothing  
can compare with it."

### IVORINE HAIR BALSAM

Prevents Baldness and Greyness,  
removes Dandruff, stimulates vigorous  
Growth, and imparts a softness and  
glossiness unrivalled by other prepara-  
tions.PEARLINE Dentifrice preserves Teeth, renders them pearly  
white, and gives delightful fragrance to the breath.

CREAM and BALSAM, 1/8 each. PEARLINE, 1/- Proprietors—

BAILEY'S TOILET COMPANY, BEDFORD.

Wholesale Prices:—

CREAM and BALSAM, 12/- each; PEARLINE, 8/- per dozen.



# RICKSECKER'S PERFUMES

## At the WORLD'S FAIR.

An Extract from the Special Report of "THE CHEMIST AND DRUGGIST," July 29, 1893.

PERFUMES form one of the most attractive features in the ground-floor section. A prominent and most artistic exhibit is that of THEO. RICKSECKER, of Maiden Lane, New York, which occupies a corner of the aisle as we approach from the north entrance. Here there is a series of eight cases decorated in green enamel and gold, forming a kind of wedge.

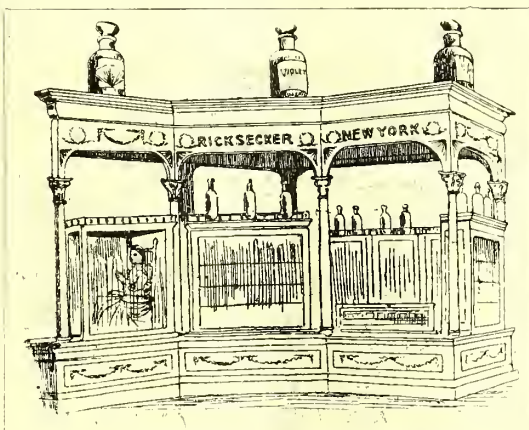
The apical case contains a figure of the woman most revered by all Americans—Martha Washington, the mother of the Republic. This figure is modelled in wax, and is, we believe, a true likeness. Martha Washington was a charming and lovely woman, and Mr. Ricksecker has not failed to do her beauty justice, for the dressing of the figure is as tasteful and elegant a costume as would serve for a royal wedding. This unique feature naturally attracts attention to the exhibit, and once the visitor begins to inspect it he finds many things to interest him.

There is a charm about the Ricksecker perfumes which is unusual: they are elegantly put up, both the shapes of bottles and the style of labels being quite *sui generis*. This is particularly noticeable in such perfumes as lavender-Cologne, sweet clover, and many others which might be named. The perfumes are displayed in magnificent vases and flasks as well as in the usual bottles for retailing, and they are set off by a selection of solid perfumes (sachets, &c.), which are also of elegant get-up.

In connection with these perfumes we may mention that the syndicate having the exclusive sale of per-

fumery at the Fair selected them as the only kind to be sold there, and the company which purchased the concession for selling perfumery through machines use them only in the 200 machines on the World's Fair grounds.

Besides perfumes the exhibit contains a good selection of toilet-preparations, such as tooth-powders, face-powders, reviving-salts, and soaps. There is a 165-lb. block of Ricksecker skin-soap on show which looks just like marble, and which, we noticed, was always dry whatever the state of the weather might be. This is a distinct innovation in toilet-soaps, for it eschews all the characteristics which are generally taken to imply attractiveness. For instance, it is not brightly coloured, nor is it scented—the oleaceous base is purely vegetable and in saponification the amount of alkali is rigidly hit off, and by subsequent treatment the soap is brought to a condition of strict neutrality. In appearance the soap looks well, for it



is milled five times, so that it comes out almost cream in colour, and the odour is not unpleasant. It gives a smooth but not abundant lather which can lie upon the skin for a long time without producing irritation, and its detergent qualities are excellent.

It will be noticed from the sketch that Mr. Ricksecker's exhibit is surmounted by three gigantic bottles of perfume, and we ought to add that the cases are so arranged as to form an office within which the attendant can receive visitors, who also have the privilege of writing letters in the office.

MANUFACTURED SOLELY BY

**THEO. RICKSECKER, MAIDEN LANE, NEW YORK CITY.**

English Agents—LYNCH & CO., LIM., Aldersgate Street, LONDON. E.C.



SAMPLE ORDER REQUESTED.

ESTABLISHED  
HALF  
A CENTURY.Telegraphic & Cable  
Address—  
"ELASTIC  
NOTTINGHAM."**THOMAS GLOVER & SON,**  
Elastic Stocking and Surgical Appliance Manufacturers,  
RUSSELL STREET STEAM MILLS, NOTTINGHAM.

Manufacturers by steam power of every description of Surgical Elastic Hosiery suitable for all Climates. Abdominal Belts, Elastic Webs and Stockingette Bandage, all widths and colours; Hot-water Bottles, Urinals, Enemas, seamless and others. Nets and Rubber Coverers to the trade. Prussian, Silk, Galoon, and Stay Bindings, Cords, Webs, &amp;c.

The only Firm in existence that actually make their goods from the raw materials.  
Special orders delivered promptly. Special Terms to Wholesale Houses and Shippers.*This Advertisement appears alternate weeks. When ordering please mention this Journal.***JOSEPH WATSON & SONS,**  
MANUFACTURERS OF  
**GLYCERINE**

DOUBLE DISTILLED CHEMICALLY PURE, 1260 Sp.G.,

ALSO FOR

NITRO-GLYCERINE AND OTHER MANUFACTURING PURPOSES.

PACKED IN 10 AND 5 CWT. IRON DRUMS, TO BE RETURNED. AND IN 56 LBS. TINS FREE

**WHITEHALL SOAP WORKS, LEEDS.****H. P. TRUEFITT'S  
SPECIALITIES FOR THE HAIR.**

Floral Extract, 3/6, 5/-,

10/6, 21/-

Egg Yulep, 2/-, 4/-

CONCENTRATED

Egg Yulep, 2/6,

5/-, 10/6.

Golden Fluid,

10/6, 21/-

EUXURON,

1/6.

&amp;c.

Stimulating Lotion, 5/-,

10/6.

Astringent and Tonic

Lotion, 5/-, 10/6.

Quinine and Arnica

Hair Wash, 3/6,

5/-, 10/6, 21/-

Arnica Wash.

3/6, 5/-,

10/6.

&amp;c.

**EUCHRISMA.**  
Combines in one clear Fluid every valuable  
Component both of a Hair Grease and Wash,  
3/6, 5/-, 10/6, 21/-.**EAU RACINE.**  
For restoring the original colour of Grey Hair,  
superior to all other Restorers, being perfectly  
simple in its Components. Price 9/-.An elegant Preparation for  
the Hair and Beard.  
Price 2/6, 3/6, 5/-, 10/6, 21/-.**BRILLANTINE****H. P. TRUEFITT'S TONIC TOOTH BRUSH**

(BY ROYAL LETTERS PATENT.)

**PRICE ONE SHILLING.**

20 &amp; 21 Burlington Arcade; 13 &amp; 14 Old Bond St., London.

**"PRICE'S  
GLYCERINE"**

(Originally introduced in 1855).

**Guaranteed free from ARSENIC****and all other impurities.**

WHOLESALE FROM

**PRICE'S PATENT CANDLE CO.,  
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London, Liverpool, and Manchester.



# MULHENS' ORIGINAL No. 4711 BRAND OF EAU DE COLOGNE

THE

Blue & Gold Labelled

EXTRACT OF

DOUBLE STRENGTH

IS RETAILED AT THE

LONDON BRANCH

AT

2/6 per 4 oz. bottle

OR

12/6 per case of six.

HIGHEST

AWARDS

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THE

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EXTRACT OF

DOUBLE STRENGTH

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The PUREST

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The MOST LASTING

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The MOST DELICATE

EVER PRODUCED.

NEVER VARIES

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QUALITY.

**ONLY FIRST PRIZE AT COLOGNE, 1875.**

WHEN ORDERING DO NOT OMIT TO MENTION THE

**No. 4711 AND THE BLUE AND GOLD LABEL.**  
OF ALL WHOLESALE FIRMS IN THE UNITED KINGDOM.

Manufacturer : FERD. MULHENS, 4711 Glockengasse, Cologne-on-Rhine.

BRANCHES AT NEW YORK, VIENNA, RIGA, ODESSA, AND

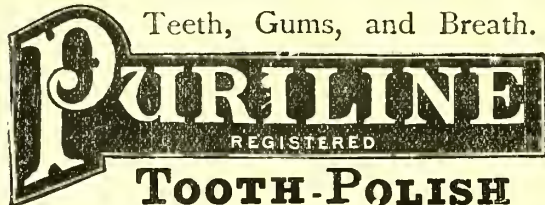
**LONDON, 62 NEW BOND STREET, W.**

Mr. R. T. REUTER, Wholesale and Export Agent. SHIPPERS are requested to communicate with Mr. Reuter. See also "The Chemist and Druggist" of 24 Dec., 1892, page 906.



# GOLD MEDAL JAMAICA EXHIBITION.

A PURE AND PERFECT ARTICLE FOR  
Teeth, Gums, and Breath.



Will purify and beautify the Teeth with a pearly whiteness polish the enamel; prevent tartar; destroy all living germs and keep the mouth in a delicious condition of comfort, health, purity, and fragrance. Non-gritty, and absolutely pure and harmless to use. Price One Shilling, in handsome Enamel Box.

The **POPULAR DENTIFRICE**, which Sells at Sight,  
Handsomely put up in Show-cases, as here shown. Printed  
in Twelve Colours. An ornament to any window.  
Price 7/6 per dozen, of all Wholesale Houses.



The **COURT CIRCULAR** says:—"Puriline" emanates from the laboratory of 'Bunter's Nervine' fame. Bunter's previous preparations for the teeth have received such high encomiums from medical men that it is not surprising that this latest production should have received the recognition and approval of those best qualified to pronounce on its merits."

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Proprietor of "Bunter's Nervine," "Dentine,"  
and "Puriline."

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Retail Price 5/- per Bottle.



Messrs. F. NEWBURY & SONS, 1 King Edward Street, London, E.C., will be happy to quote most advantageous terms for the above, and Dr. Horn's other renowned Specialties for the Hair.

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MANCHESTER.**

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Paper-wrapped Tablets, averaging about 4 to the pound.

1 dozen boxes, each 1s. 2d. } Subject to Trade Discount.  
3 " " " 4s. 6d.

\*.\* Order above as Calvert's **HYGIENIC BRAND**.

**FULLER'S EARTH SOAP, PUMICE SOAP, and PETROFENIC SOAP (for the Hair).**

Neat paper-wrapped Tablets, averaging about 2 1/2 oz. each. 1 dozen boxes, each 1s. 3d., less Trade Discount.

\*.\* Order above as **CALVERTS**.

\*\*\*\*\*

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# Corn and

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# Plasters.

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FOR THE HAIR.

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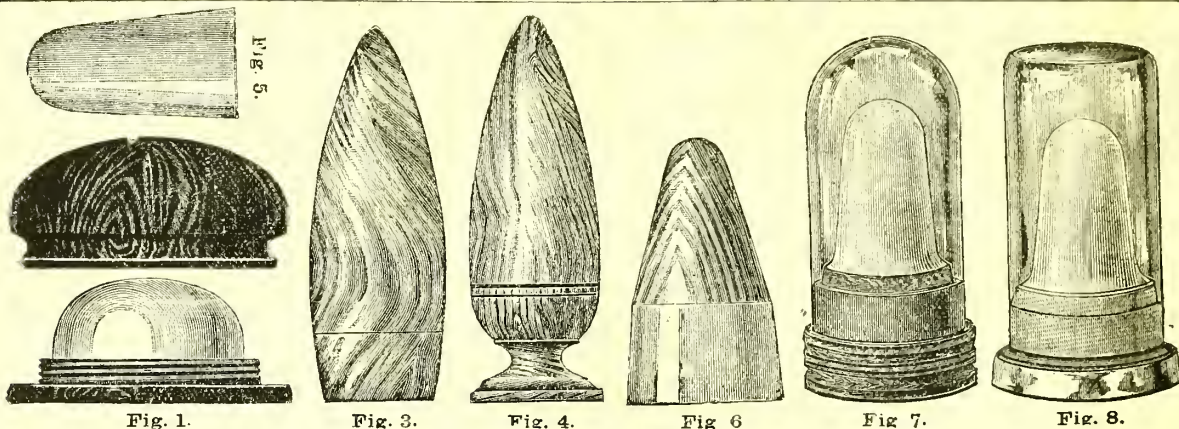


Fig. 1.—In Ebony Cases, flat for the pocket	...	...	...	...	...	per doz.	4/6
Fig. 1.—In Boxwood Cases ditto	...	...	...	...	...	per doz.	2/10, 3/6, and 5/6
Fig. 3 & 4.—In Boxwood Cases	...	...	...	...	...	"	2/3, 3/9, and 5/9
Fig. 3.—In Boxwood Cases, with Reversible Screw	...	...	...	...	...	per doz.	4/-
Fig. 5.—In White Opaque Glass Jars, with Red Celluloid Caps	...	...	...	...	...	"	2/3 and 3/3
Fig. 5.—Mounted, in Stoppered Bottles	...	...	...	...	...	"	6/9
Fig. 6.—Mounted on Vegetable Ivory, in Glass Bottles, Screw Metal Caps	...	...	...	...	...	"	4/3
Fig. 7.—On Glass Mounts, Glass Covers	...	...	...	...	...	"	3/2 and 4/3
Fig. 7.—On Earthenware Mounts, Glass Covers...	...	...	...	...	...	"	4/6 and 7/-
Fig. 8.—On Glass Mounts, with Glass Covers	...	...	...	...	...	"	5/3

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Telephone Number, 1852.

Telegraphic Address—CHEMICUS LONDON.

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## ACETIC ACID

Fuerst Bros.  
Lorenz, H.  
Morris & Callard (Salts)  
**ACIDS**  
Boulton, J., & Co., Lim.  
Typle & King

## ADVERTISING SPECIALITIES

Hildesheimer, A.  
Lawton, J. W. | Sears, F. W.

## AERD &amp; MINERALS

Apollinaris Co.  
Barnett & Foster  
Burroughs, Wellcome & Co.  
Chemists' Aërated Waters Association, Lim.Ellis & Son (Ruthin)  
Idris & Co., Lim.  
Ingram & Royle  
Jewsbury & Brown  
Johnnie Co.  
Kimmond & Co.  
Mills & Co. (Bourne)

## DITTO PLANT

[See SPONGES and ESSENCE]  
Barnett & Foster  
Bratby & Hinchliffe, Lim.  
Evans, Sons & Co.  
Guert FreresMeadowcroft & Son  
Mylands, Dan, Lim.  
Tyler, Hayward, & Co.

## AGENCIES ABROAD

Australian Drug Co.  
Kempthorne, Prosser & Co.  
Lennon, B. G., & Co. (N.Z.)  
Peake, Allen & Co.  
Prosser, Taylor & Co.  
W. H., & Co.

## ALKALOIDS

Howards & Sons (Cinchona)  
Smith, T. H., & Co.

## ALMANACKS

Davis, J., Lim.  
Faulkner, C. W., & Co.  
Ford, Shapland & Co.  
McKenzie, W., & Co.  
Silverlock, H. | Townsend, J.

## AMMONIA

May & Baker, Lim.  
White, A., & Sons  
Woolley, Sons & Co.

## APPARATUS

Bennett, Sons & Shears  
Berend, O., & Co.  
Christy, T., & Co.  
Hicks, J. J. | Ohlson, A.  
Orme, J., & Co. (Scientific)

Poths, H., &amp; Co.

## BAKING POWDER

Goodall, Backhouse &amp; Co.

## BANDAGES

Bailey, W. H., & Son  
Robinson & Sons  
Schutze, F., & Co.  
Wood, Vincent

## BATH &amp; FLESH GLOVES

Barclay & Sons, Lim.  
Chemists' Association, Lim.  
Maw, S., Son & Thompson  
Pattison, G. | Solport Bros.  
Wood, Vincent

## BEEF EXTRACT

Liquor Carnis Co., Lim.

## BICARB. SODA

Brunner, Mond & Co., Lim.  
Howards & Sons  
May & Baker, Lim.

## BISMUTH PREP.

Hearon, Squire & Francis  
Hewlett & Sons  
Howards & Sons  
May & Baker, Lim.  
Symes & Co. | Tyler, T., & Co.  
White, Alfred, & Sons

## BOXES

Harrreaves, Dr., M. D.  
Lewis, H. K. | Murray, Jno.  
Silverlock, H.

## BORAX

Howards & Sons  
Mack's Starch

## BOTTLES

Aire & Calder Bottle Co., Lim.  
Barnett & Foster  
Barrett, R. H.  
Bratby & Hinchliffe, Lim.Evans, Sons & Co.  
Gilbertson, H., & Sons  
Hearn, Wright & Co.  
Isaacs & Co.Johansen & Jørgensen  
Kilner Bros.  
Maw, S., Son & Thompson  
Poths, H., & Co.  
Rylands, Dan, Lim.Toogood, W.  
"W" Brand Bottles  
Youldon, E.

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Ayrton & Saunders  
Crowden & Garrod  
Evans, Sons & Co.Kent, G. B., & Sons  
Kilner Bros. | Maxime & Co.  
Robinson & Sons  
Rylands, Dan, Lim.

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Evans, Sons & Co.  
Kent, G. B., & Sons

## BUNSEN BURNERS

Berend &amp; Co.

## BUTTER COLR. &amp;c.

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Crawshaw & Co.  
Hartick & Co., Lim.  
Tomlinson & Hayward

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Blyton, Astley & Co.  
Jackson, Thos. | Pascall, J.  
Raines & Co. | Warrick Bros.

## CAMPHOR

Fuerst Bros. | Howards & Sons  
May & Baker, Lim.

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Denoual, J. (Medicinal)  
Duncan, Flockhart & Co.  
Evans, Sons & Co.Hick & Co., Lim.  
Hickroyd, J., & Co. (Moulds)  
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Lloyd, T. Howard, & Co.Lofthouse & Saltmer  
Richardson, John, & Co. (Leicester), Lim.  
Warrick Bros.

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Mason, C. E., & Co.

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Duncan, Flockhart & Co.  
Evans, Sons & Co.Ferre & Co. | Moss, J., & Co.  
Maw, S., Son & Thompson  
Christy & Co. (Aromaticum)  
Fuerst Bros.

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Lorimer & Co.Maw, S., Son & Thompson  
May, Roberts & Co.  
Newbery, F., & Sons  
Sanger & Sons

## CERESINE WAX

Boehm, Fredk.

## CHECK TILLS

National Cash Till Co.  
Patent Voucher Check Till Co., Lim.

Stokes, G. E., &amp; Co., Lim.

## CHEMICALS

Boehm, Fredk.  
Boehring, C. F., & Sohne  
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Fletcher, Fletcher & Stevenson  
Fuerst Bros.Goodall, Backhouse & Co.  
Hill, A. S., & Son (Clarke)  
Hockkingsons, Treacher & Howards & Sons (Pharm.)Levermore, Aug., & Co.  
Lofthouse & Saltmer  
Lorenz, H.May & Baker, Lim.  
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Smith, T. H., & Co.Typle & King | Tyler, T., & Co.  
Washington Chemical Co.  
White, A., & Sons

Zimmermann, A. &amp; M.

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Chemists' Association, Lim.  
Hockkingsons, Treacher & Howards & Sons (Pharm.)Liverpool Patent Lint Co.  
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Newbery, F., & Sons  
Pattison, G.Schutze & Co. | Solport Bros.  
Wood, VincentCHLOR. OF LIME  
Government Sanitary Co.  
National Chemical Co.CELESTORFORM, &c.  
Arthur & Co.  
Duncan, Flockhart & Co.Macfarlan, J. F., & Son  
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Wright, Layman & Unney  
Zimmermann, A. & M.



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Bleasdale & Co.  
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Evans, Sons & Co.  
Hill, A. S., & Son  
Hockin, Wilson & Co.  
Robinson & Co.  
Smith, T. & H., & Co.  
Woolley, Sons & Co.

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**COLAPSE TUBES**

Betts & Co.

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Bylton, Astley & Co.  
Burroughs, Wellcome & Co.  
Fuerst Bros.  
Hooper, B., & Co. | Leo & Co.  
Lloyd, T. Howard & Co.

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Fletcher, Fletcher & Stevenson  
Lloyd, T. Howard & Co.

**COKE CURES**

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Solport Bros.  
Warrick Bros.

**COTTON WOOL**

Haynes, G. & Co. (Absorbent)  
Robinson & Co. (Absorbent)  
Sanger, J., & Sons

**CRASH LINSEED**

Mumford, S. G.

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Bromley, H., & Co.  
Dorothy Dentifrice Co.  
Hanson, O.  
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Jewsbury & Brown  
Lakeman, J.  
Quelch, H. C.  
Ricksecker, Uno  
Robertshaw & Co.  
Stevens, P. A.  
Sutton, O., & Co.  
Thompson & Capper  
Warrick Bros. | Wilson, A.  
Woods, W. (Aqua Nit.)

**DENTISTRY**

Browning, A. J.

**DISINFECTANTS**

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Bylton, Astley & Co.  
Brooks, T.  
Burroughs, Wellcome & Co.  
Calvert, F. C., & Co.  
Drysdale, J. W., & Co.  
Dussek Bros. & Co.  
Fletcher Bros. & Co.  
Hebden, W. C.  
Government Sanitary Co.  
Grindley & Co., Lim.  
Izal  
Jeyes' Sanitary Compounds Co.  
Mackay, Mackay & Co.  
Mason, C. E., & Co.  
May & Baker, Lim.  
National Chemical Co.  
Sanitase Co., Lim.  
Seabury & Johnson  
Tyrer, T., & Co.

**DOG MEDICINES**

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Spratt's Patent, Lim.

**DRUGS**

Hopt, R.

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Bailey, M., & Co.  
Barclay & Sons, Lim.  
Chemists' Association, Lim.  
Chemists' Mineral Water Association, Lim.  
Crowden & Grand  
Evans, Lecher & Webb  
Evans, Sons & Co. (Savars)  
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Foulkes & Co.  
Gillbertson, H., & Sons  
Hockin, Wilson & Co.  
Idris & Co., Lim.  
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Sanger & Sons  
Schultze & Co.  
Tidman & Son | Toogood, W.  
Tyer Rubber Co.  
Wood, Vincent | Young, J.

**DRYSALTERIES**

Browning, J. H., & Co.  
Burton, W., & Sons

**DYES, &c.**

Ayrton & Saunders  
Burton, W., & Sons  
Crawshaw & Co.

**EAU DE COLOGNE**

Farina, J. M.  
Hockin, Wilson & Co. (Farina)  
Martin, Maria (Nun)  
Moulin, Oscar, & Co.  
Mulhens, F.

**ELECTRIC APPAR.**

Darton, F., & Co.  
Gent & Co. | Orme & Co.

**EMEROCATION**

Day & Sons

**ENEMAS**

Barclays, Lim.

Evans, Sons & Co.  
Sanger & Son  
Wood, Vincent

**ENGRAVERS**

Corsan, J. B.

**ESSENCES**

Boehm, Fredk.  
Boulton, J., & Co. (Lim.)  
Brady & Hinchliffe, Lim.  
Burykone, Burdidge & Co.  
Bush, W. J., & Co.  
Fletcher, Fletcher & Stevenson  
Goodall, Backhouse & Co.  
Idris & Co., Lim.  
May & Baker, Lim.  
Stevens, & Son  
Newhall & Mason  
Rylands, Dan, Lim.  
Stevenson & Howell  
Tyrer, P. (Anchovias)  
Tyrer, T., & Co.  
Woolley, Sons & Co.

**ESSENTIAL OILS**

Allen, Stafford, & Sons  
Barrett, A. A.  
Boehm, Fredk.  
Brummerstaedt & Liders  
Bush, W. J., & Co.  
Clay, Dod & Co.  
Cocking & Co. (Japan Pepper)  
Dodge & Olcott (mint)  
Evans, Sons & Co.  
Hodgkinson, Treacher & Clark  
May & Baker, Lim.  
Meadowcroft & Sons  
Rylands, Dan, Lim.  
Sozio & Andrioli  
Stevenson & Howell  
Sykes & Co.  
Treath, R. C.  
Warrick Bros.  
Witrofsky, E.  
Wright, Layman & Umney

**ETHER**

Duncan, Flockhart & Co.  
Howard & Sons  
May & Baker, Lim.  
Robbins, J., & Co.  
Tyrer, T., & Co.  
White, A., & Sons  
Woolley, Sons & Co.  
Wright, Layman & Umney

**EUCALYPTUS**

Bickford, Bonisto's  
Drysdale, J. W., & Co.  
Evans, Lecher & Webb  
Fletcher, Fletcher & Stevenson  
Grinwald, Kidley & Co.  
Laughland, Mackay & Baker  
Mackay, Mackay & Co.  
Murdock, J., & Co.  
Tasmanian Eucalyptus Oil Co.  
Woods & Co.

**EXALGINE**

Kuhn, B.

**EXTRACT MEAT**

Armour & Co.  
Bovril  
Brand & Co.  
Bush's Liquid Beef  
Idris & Co. (Viking Co.)  
Liebig Co.  
Mason, G., & Co., Lim.  
Wyeth, J., & Brother

**EXTRACTS, FLUID**

Allen & Hanbury  
Burykone, Burdidge & Co.  
Evans, Sons & Co.  
Fletcher, Fletcher & Stevenson  
Hearon, Squire & Francis  
Hooper, B., & Co.  
Lloyd, T. Howard, & Co.  
Moss & Co.  
Potter & Clarke  
Wright, Layman & Umney

**FEED BOTTLES**

Burroughs, Wellcome & Co.  
(Thermo Safe)

**FILTERS**

Berkfeld Filter Co.  
Fordham, W. B., & Sons, Lim.  
Mawson Filter Co.  
Silicated Carbon Filter Co.

**FLY PAPERS**

Ford, Shapland & Co.  
Strong, Christy  
Tunbridge & Wright

**FORMULA**

Brooks, T.

**FOOD (Infants' & Invalid's)**

Allen & Hanbury  
Benger's Food  
Brand & Co.  
Chinnall, H. B.  
Evans, Sons & Co.  
Goodall, Backhouse & Co.  
Hearon, Squire & Francis  
Kling, F., & Co. (Lim.)  
Liebig Co.  
Lorimer & Co.  
Mason, G., & Co., Lim.  
Mellin's Food  
Nestle, H.  
Ridge, Dr.  
Tyrer, P.  
Viking Food Co.  
Wyeth, J., & Bro.

**GINGER ALE**

Mills, R. M., & Co.  
Riggs, Sons (Lim.)

**GLYCERINE**

Bylton, Astley & Co. (Pastilles)  
Boehm, F. | Fink & Co.  
Fuerst Bros.  
Prior's Candle Co., Lim.  
Watson & Sons

**GOUT & RHEU-**

**MATIC PILLS**

Bromley, C.  
Prout & Harsant (Blair's)

**GRANULAR PREP.**

Bishop, A., & Sons  
Bylton, Astley & Co.  
Evans, Sons & Co.  
Hearon, Squire & Francis  
Lloyd, T. Howard, & Co.  
Wright, Layman & Umney

**GUM**

Fink & Co. (Arabic, &c.)

**HAIR PREP.**

Anglo-American Drug Co.  
Chesbrough Co. (Lim.)  
Edwards & Co.  
Horn, O. E.  
Ricksecker, Theo.  
Truett, H. P., Lim.

**HERE BEER EXTS**

Prior's Mason  
Potter & Clarke  
Schmidt, Karl

**HOMOPATHIC**

Epps & Co.  
Keene & Ashwell  
Leach & Ross  
Thompson & Capper  
Watson & Wates

**HONEY**

Evans, Sons & Co.  
May, Roberts & Co.

**HYPOPHOSPHITES**

Duncan Flockhart & Co.  
Fellows  
Fletcher, Fletcher & Co.  
Lorimer & Co.  
Sykes & Co.  
Tyrer, T., & Co.

**INDURUS. GOODS**

Tyer Rubber Co.

**INHALERS**

Burroughs, Wellcome & Co.  
Hockin, Wilson & Co.  
Spiron, C., The  
Toogood, W.

**INK [See MARKING INKS]**

Rocke, Tompsitt & Co.  
Steiner & Co.

**JARS**

Rylands, Dan, Lim.  
Tyrer, P.

**KETCHUP**

Christy, T., & Co.

**KOLA PREPRTN**

Christy, T., & Co.

**LARD**

Bevly & Sons  
Evans, Sons & Co.  
Lorimer & Co.

**LIME JUICE**

Evans, Sons & Co.  
Lorimer & Co.

**LINT**

Liverpool Lint Co.  
Maw, S., Son & Thompson  
Newsome, C.  
Robinson & Sons

**LIQUORICE**

Dennis Di Luggo & Co.

**LITHIA**

Fuerst Bros.

**LOZENGES**

Allen & Hanbury  
Bylton, Astley & Co.  
Davidson & Gray  
Gibson, K., & Sons (Manfrs.)  
Hill & Son  
Jackson, T.  
Lorimer & Co.  
Pascall, J.  
Raines & Co. | Warrick Bros.

**MACHINERY**

Bonnett, Sons & Shears (Lim.)  
Burroughs, Wellcome & Co.  
Gardner, W.  
Martin Fells & Co.  
Ohlson, A.  
Pindar, J. W.  
Strutners & Gratz (Sifting)  
Werner & Pheiderer (Knead.)

**MAGNESIA**

Bush, W., Son & Co.  
Duncan, Fuller & Co.  
Evans, Sons & Co.  
Henry, T. & W. (Calcedined)  
Hill, A. S., & Son  
Washington Chemical Co.

**MALT EXTRACT, &c.**

Allen & Hanbury  
Burroughs, Wellcome & Co.  
(Keppler's)  
Glendenning, W.  
Hearon, Squire & Francis  
Lorimer & Co.  
Moss, J., & Co.  
Kalm & Co.  
Richardson, John, & Co. (Lel-  
cester), Lim.  
Robinson & Co.

**MARKING INKS**

Bond, John (Crystal Palace)  
(Ink and Pencils)

**MEDICINE CHSTS**

Burroughs, Wellcome & Co.  
Day, Son & Hewitt (Veterinary)  
Day & Sons (Veterinary)

**MENTHOL**

Burroughs, Wellcome & Co.  
Christy, T., & Co.  
Cocking & Co.  
Duncan, Fuller & Co.  
Evans, Sons & Co.  
Hockin, Wilson & Co.  
Maw, S., Son & Thompson  
Tyrer, F. | Vint, T. W.

**MERCURIUS**

Fuerst Bros.  
Howard & Sons  
May & Baker, Lim.  
Tyrer, T., & Co.

**METH. SPIRITS, &c.**

Boord & Son | Burroughs, J.  
Jones & Co.  
Phillips, G., & Co.  
Smith, T., & Co.

**METHYLENE**

Robbins, J., & Co.

**MICROSCOPES**

Darton, F., & Co.  
Perken, Son & Rayment

**MILK**

Nestle, H. (Condensed)

**MORPHIA**

Macfarlan, J. P., & Co.  
Smith, T., & H., & Co.  
Boulton, J., & Co., Lim.  
Brady & Martin  
Byce & Kumpff  
Burykone, Burdidge & Co.  
Burroughs, Wellcome & Co.  
Chassaing & Co.  
Duncan, Flockhart & Co.  
Fleisch, & Co.  
Fletcher, Fletcher & Co.  
Giles, Schenck & Co.  
Hearon, Squire & Francis  
Hewlett & Son  
Howards & Sons  
Jeyes' Sanitary Compounds Co.  
Lambert Pharmacol Co.  
May & Baker, Lim.  
Moss, J., & Co.  
Potter & Clark  
Richardson, John, & Co. (Lei-  
Roberts & Co. (cester), Lim.  
Smith, T., & H., & Co.  
Southall Bros. & Barclay  
Sutton, W., & Co.  
Sykes & Co.  
Tyrer, T., & Co.  
White, Alfred, & Sons  
Woolley, Sons & Co.  
Wyeth, Jno., & Bro.  
Zimmermann, A. & M.

**OILS, PAINTS, &c.**

Browning, J. H., & Co.  
Fox, W., & Sons  
Fuchin, Johnson & Co.

**OPHTH. BASES**

Burgess, E., & Co.  
Burroughs, Wellcome & Co.  
(Lanoline)  
Chesbrough Co. (Vaseline)  
Christy, T., & Co.  
Lanoline  
Lloyd, T. Howard, & Co.  
Richardson, J., & Co. (Leice-  
ster), Lim. (Anaspaline)

**OPUM**

Hopt, R.

**OPTICIANS**

Botwright & Grey  
Darton, F., & Co.

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Fuerst Bros.  
Warrick Bros.  
Witrofsky, J. R.

**OXIDE OF ZINC**

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**PAPAIN**

Kuhn, B. (Dr. Finkler)

**PAT. MEDICNS, &c.**

Anglo-Amer. Drug Co., Lim.  
Atkinson & Barker (Infant  
Preserv.)  
Barclay & Sons, Lim.  
Beecham, T. (Pills)  
Bow's, Dr. (Lutiment)  
Bromley, C. (Gout and Rheu.)  
Chemists' Association, Lim.  
Clarke's Blood Mixture  
Congreve, G. F.  
Edwards & Son  
Evans, Lecher & Webb  
Fassett & Johnson  
Fleming (Powders)  
Goodall, Backhouse & Co.  
Holloway (Pills and Oint.)  
Hovenden & Sons  
Lalor (Phosphodyne, &c.)  
Mackenzie, Dr. (Calath Cure)  
May, Roberts & Co.  
Newbery, F., & Sons  
Popular Rev. J. Mfg. Co.  
Roberts & C. (Foreign)  
Rooke, Dr. im.  
Southall E. J. & Barclay  
Sutton, W., & Co.  
Wilson, A. (Bunter's Nervine)

**PEPSIN, &c.**

Arnaud & Co.  
Burroughs, Wellcome & Co.  
Chassaing & Co.  
Fletcher, Fletcher & Stevenson  
Kuhn, B.  
Lorimer & Co.  
Newbery, F., & Sons (Ingulin)  
Stern, G. & G.  
Warner & Co. (Ingulin)

**PEPPERMINT OIL**

Bush, W. J., & Co.  
Cocking & Co.  
Stern, P. & Howell

**PEROX. OF HYD.**

Burton, W., & Sons  
May & Baker, Lim.  
Robbins & Co.

**PETROLEUM**

Allen & Hanbury  
Barclay & Sons, Lim.  
Dee Oil Co., Lim.  
Fuerst Bros. (Jelly)

**PERFUMERY, FANCY SOAPS**

Barclay & Sons, Lim.  
Bleasdale & Co.  
Blondan & Co. | Boehm, F.  
Bylton, Astley & Co.  
Brooks, T. (Solid Perfums)  
Brummerstaedt & Liders  
Burroughs, Wellcome & Co.  
Bush, W. & Co.  
Chemists' Association, Lim.  
Chesbrough Co.  
Crown Perfumery Co.  
Evans, Sons & Co.  
Ewen, J., & Sons  
Farina, J. M.  
Greensill & Son  
Hovenden & Sons  
Lanoline  
Newbery, F., & Sons (Gerdoes)  
Pears, A. & F., Lim.  
Potter & Clarke  
Price's Patent Candle Co.  
Ricksecker, Theo.  
Sands & Co.  
Sozio & Andrioli  
Tidman & Son | Treath, R. O.  
Truett, H. P., Lim.  
Warrick Brothers  
Wright, Layman & Umney

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Arthur & Co.  
Baiss Bros.  
Barron, Harveys & Co.  
Bieber, J. D., Boehm, Fredk.  
Boehring, Dr. C., & Sonne  
Boulton, J., & Co., Lim.  
Brady & Martin  
Byce & Kumpff  
Burykone, Burdidge & Co.  
Burroughs, Wellcome & Co.  
Chassaing & Co.  
Duncan, Flockhart & Co.  
Fleisch, & Co.  
Fletcher, Fletcher & Co.  
Giles, Schenck & Co.  
Hearon, Squire & Francis  
Hewlett & Son  
Howards & Sons  
Jeyes' Sanitary Compounds Co.  
Lambert Pharmacol Co.  
May & Baker, Lim.  
Moss, J., & Co.  
Potter & Clark  
Richardson, John, & Co. (Lei-  
Roberts & Co. (cester), Lim.  
Smith, T., & H., & Co.  
Southall Bros. & Barclay  
Sutton, W., & Co.  
Sykes & Co.  
Tyrer, T., & Co.  
White, Alfred, & Sons  
Woolley, Sons & Co.  
Wyeth, Jno., & Bro.  
Zimmermann, A. & M.

**PHOTOGRAPHIC**

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Blackfriars' Photographic Co.  
Boehm, Fredk.  
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Burroughs, Wellcome & Co.  
Darton, F., & Co.  
Fuerst Bros.  
Howards & Sons (Chemicals)  
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Orme, J., & Co.  
Tyrer, T., & Co.  
White, Alfred, & Sons  
Zimmerman & Co.

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Toogood, W. (Coater)  
Werner & Pheiderer

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Anders & Sons (Chemicals)  
Beecham, Thomas  
Bylton, Astley & Co.  
Bromley, C. (Gout & Rheu.)  
Burgess, E., Jun.  
Clay, Dod & Co.  
Corr, Arthur H., & Co. (tastils)  
Davidson & Gray  
Dr. Williams  
Duncan, Flockhart & Co.  
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Evans, Sons & Co.  
Harroline Pill Co.  
Hearon, Squire & Francis  
Hill



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Silverlock, H.  
Taylor Bros. | Townsend, J.

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Howards & Sons  
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**RENNET**

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Victoria Rubber Co.

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Jeyes'Sanitary Compounds Co.  
Tomlinson & Hayward

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City School of Chemistry and  
Pharmacy, Lim.  
Davis, Fredk.  
Liverpool School of Pharmacy  
London Homoeopathic and  
Medical School  
Manchester Col. of Pharmacy  
Mason College  
Metropolitan Coll. of Pharmacy  
Middlesex Hospital Medical  
School

Northern School of Pharmacy  
Owens College  
Royal College of Science  
School of Pharmacy  
Sheffield College of Pharmacy  
South London School of  
Pharmacy, Lim.  
St. Mary's Hospital School  
The School of Pharmacy  
Westminster College  
Will, W. W.

**SEEDS**

Potter & Clarke

**SELTZOGENES**

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Evans, Sons & Co.  
Geraut, E., & Co.  
May, Roberts & Co.

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Bygrave, J. & W.  
Evans, Sons & Co.  
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Natali & Co. | Natali, E.  
Poths, H., & Co.

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Barclay & Sons, Lim.  
Blondeau & Cie. (Vinolia)  
Bronnie, H., & Co.  
Calvert, F. C., & Co.  
Cook, E., & Co.  
Dodd Bros.  
Fordham, W. B., & Sons, Lim.  
Jeyes'Sanitary Compounds Co  
Martin, Perls & Co.  
Muhlen, F.  
Pears, A. & F., Lim.  
Prie, Napoleon, & Co., Lim.  
Wright, Layman & Umney

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Darton, F., & Co.  
Perken, Son & Rayment

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Hickisson, J.

**STARCH**

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Crichtley (Gloss) (Double)

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Barnett & Foster | Melin, C.

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Cocking, J. T.  
Eschmann Bros. & Walsh  
Glover & Son  
Hartick & Co., Lim.  
Haywood, J. H.  
Liverpool Patent Lint Co.  
Macfarlan, J. F., & Co.  
Maw, S., Son & Thompson  
Powell & Barstow  
Queloh, H. C.  
Richardson, John, & Co. (Lel-  
cester), Lim.  
Robinson & Sons  
Schultz, F., & Co.  
Tyer Rubber Co.  
Victoris Rubber Co.  
Wood, Vincent

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British Syphon Co.  
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Perken, Son & Rayment

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Lorimer & Co.  
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Ricksecker, Theo.  
Truefitt, H. F., Lim.

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Woods, M. (Arecia)

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Vaccine Association (Lymph)

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Orridge & Co.

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Bush, W. J., & Co.  
Clay, Dod & Co.  
Demarchi Parodi & Co.  
Evans, Sons & Co.  
Evans, Lecher & Webb  
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Ferris & Co.  
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Goodall, Backhouse & Co.  
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Hearon, Squires & Francis  
Hewlett & Son  
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Hodgkinson, Treacher  
Lloyd, T. Howard, & Co.  
Lothouse & Saltmer  
Macfarlan, J. F., & Co.  
Murdoch, J. R., & Co.  
Potter & Clarke  
Richardson, J., & Co., Lim.  
Symms & Co.  
Thompson & Capper  
Walkers, Troke & Co.  
Willows, Francis & Bntlar  
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Wright, Layman & Umney

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(A)

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(B)

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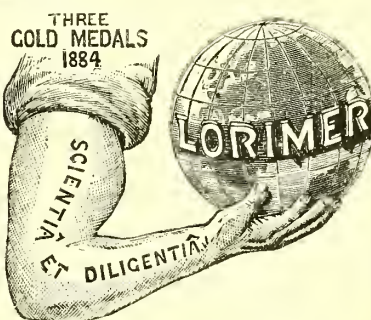
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(LORIMER'S).

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Wrapped and each dozen in carton ...	3/-	4/-	4/6	8/3 doz.
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For Illustrated Price List, see the Summer Issue of "The Chemist and Druggist."



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# **Dr. WILLIAMS' PINK PILLS FOR PALE PEOPLE.**

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SECOND EDITION.

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HISTORY WORTH READING."**

The First Edition (running into millions) of the above pamphlet was some time ago exhausted.

The New Edition is now ready, and is being largely distributed from house to house in various districts, as is also the New Four-page Illustrated Handbill.



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Supplied to the Trade by all Chemists in neat cases, containing also a sufficiency of both Pinol and Eucalyptia for fair trial, at 14/- per dozen.

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These are composed of Cocaine, Chlorate of Potash and Borax. Chlorate of Potash is chiefly used to bring about a more healthy condition of the mucous membrane of the mouth and throat. Borax is considered an excellent antiseptic, correcting perverted oral secretions, cleansing the mouth, and imparting to an offensive

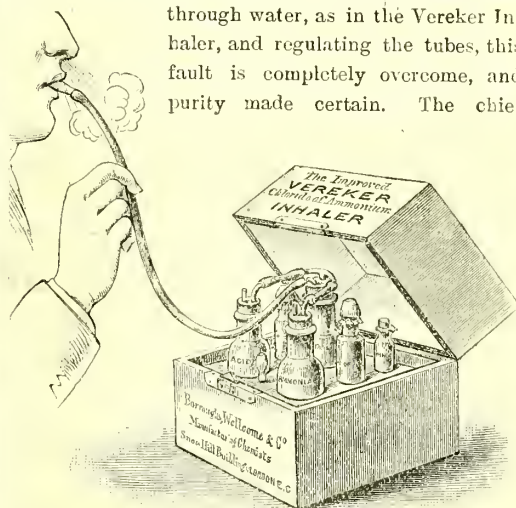


breath the wholesomeness of perfect health, while in irritation, catarrhal and other diseased conditions of the throat Cocaine as a continuous medication is very grateful. It improves the tone of the voice at once—a husky voice often clearing under its action in a couple of hours. It inures the throat to trying conditions and preserves it free from the usual unpleasant effects of inclement weather. The best way to employ Cocaine for the throat is in the form of Voice "Tabloids," which contain also Potash and Borax.

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Probably no agent is more used by throat specialists than Chloride of Ammonium Vapour. The specific action of this vapour on the respiratory membrane have long been known, but the drawback has been that on account of an excess of acid or alkali the fumes were apt to prove irritating. By passing them through water, as in the Vereker Inhaler, and regulating the tubes, this fault is completely overcome, and purity made certain. The chief



advantages afforded by this Inhaler are that it is easy to put into working order, and for weeks and months is always ready for use, that the fumes are neutral, and that anyone can use it without trouble. The fumes it yields cause no irritation, and exert a truly wonderful action upon thickened mucous membrane and thick tenacious secretions. They may reach the remotest part of the respiratory mucous surfaces, and are absolutely harmless.

Supplied to the Trade at 5/- each.

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*This preparation contains all the stimulating properties of Beef with Citrate of Iron in a pure medicinal wine. It is palatable, elegant in appearance, and can frequently be taken by patients when Iron in any other form cannot be borne.*

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The BRITISH MEDICAL JOURNAL says:—"It is a pleasant tonic and mild stimulant. It will be found most useful in cases where the use of a blood tonic is indicated. The ordinary dose for an adult is a tablespoonful, which should be taken in a little water between meals. Children also may take it in similar doses according to age."

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**COUGHS, COLDS, HOARSENESS, ASTHMA, CHRONIC BRONCHITIS,  
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This Medicine is Not Affected by the Pharmacy Act, and ALL PERSONS HOLDING A PATENT MEDICINE LICENCE MAY SELL IT. It MUST NOT be Labelled "POISON."

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## THE CHEMISTS' AND DRUGGISTS' DIARY, 1894.

THIS work is now in preparation, and in the course of this month sheets of the advertisements and literary matter will be going to press. This early publication is necessary on account of the extensive

## COLONIAL AND FOREIGN CIRCULATION

of THE CHEMIST AND DRUGGIST, and our endeavour to place all subscribers abroad as near as possible on an equal footing with those at home in the matter of time. Copies of THE DIARY for colonial and foreign parts will first be dispatched, so that subscribers may begin the year 1894 with THE DIARY on their desks. We ask advertisers to note this particularly, and to be prompt in their instructions to the publisher. We may further hint that too much care cannot be bestowed on compiling DIARY advertisements; they serve all the year round, and cannot be illustrated too freely or well where illustrations are appropriate. Prices and terms should, if possible, be made a feature. As in former years,

## A COMPLETE BUYER'S GUIDE

will be inserted in THE DIARY. This consists of a classified digest of the whole of the business announcements appearing in THE DIARY. Upon the preparation of this we bestow great care, the object being to make THE DIARY as complete a trade directory as there exists, and to facilitate business between sellers and buyers. The literary features will be of the progressive and practical nature which has characterised this publication since its inception. The publisher will give full information to business houses regarding tariff, &c. THE DIARY, we may add, is presented free to all home, colonial, and foreign subscribers to THE CHEMIST AND DRUGGIST. It is a handsomely-produced volume, and is without question the best and foremost advertising medium for the drug-trade in existence.

## Summary.

THE Dublin Magistrate has decided the Kay's Essence case in favour of Mr. Leonard, the defendant.

A BALLATER chemist has been found guilty of selling beer and stout without a licence.

SOME stringent ideas regarding the use of feeding-bottles are expressed by Dr. Budin in our French column.

MR. BURROUGHS communicates some interesting information regarding medical mission-work in Morocco.

AT Cardiff a homœopathic practitioner named Graves has been fined 20*l.* for infringement of the Apothecaries Act.

AT the meeting of the shareholders of Sequah (Limited), which we report, the speakers appeared to be hopeful of the future.

A YOUNG Inverness-shire lady has been fatally poisoned through taking hellebore in mistake for compound liquorice powder.

MR. JOSEPH INCE explains what the cabalistic sign is on the old lavender-water bottle referred to by Mr. Huskisson last week.

THE detectives think they have found the printer who furnished the labels used by the persons who sold inferior cocoa as Epps's.

THE continued dullness of the Mincing Lane drug-markets, and the principal cause of it, forms the subject of some Editorial comments.

THE Exhibitions of the Photographic Society and the Photographic Salon, both of which are now open in London, are reported in this issue.

AN unqualified chemist at Cardiff attended a young woman who died from heart-disease, and has been severely censured by the coroner and his jury.

WE give the questions set in the Preliminary examination this week, also the results of the pharmaceutical examinations held in London and in Dublin.

THE proposal to publish an International Pharmacopoeia is being taken up heartily by American pharmacists. We refer to the matter in an Editorial note.

MR. A. H. ALLEN has expressed his views regarding the vinegar question to the Sheffield Council. We also report four cases of prosecution, one of them in Ireland.

CONTINUING our report of the World's Fair, we deal this week with a number of the German exhibits of fine chemicals, and give the impressions of a visitor who has done the Fair.

A BARNSBURY doctor gave a boy-patient what he thought to be an aperient powder of calomel. It was strychnine, and the boy died quickly. The doctor cannot account for the mishap.

AN amendment of the Italian Pharmacy Law is proposed, under which a new and second class of pharmacists would be created. It is not regarded with favour in pharmaceutical circles.

THE opening address of the President of the Chemists' Assistants' Association is reported. Mr. Harrison complains that a membership of under 200 is much below what such an association should command in the metropolis.

THE report of the first meeting of the new Council of the Pharmaceutical Society of Ireland will be found interesting reading. There was a close contest for the Presidency, and the sitting was enlivened by several discussions of a personal tendency.

IN an Editorial article will be found figures giving the exact number of patent-medicine stamps of every denomination supplied during the past two years by the Board of Inland Revenue. These statistics have been supplied to us by the Board, and have never before been published.

THE Sheffield Pharmaceutical Association inaugurated their Winter Session on Thursday. Mr. John Harrison, of Sunderland, delivered an opening address.



## English News.

*The Editor is obliged to correspondents who send local newspapers containing items of interest to the trade. He will be further obliged if such paragraphs be marked in all cases.*

### Lead-poisoning in the Black Country.

An inquiry into the manufacture of white-lead and allied industries is now being held at the Sessions Court, Wolverhampton, by a Departmental Committee from the Home Office. The Committee consists of Mr. E. Goold, Superintending Inspector of Factories; Mr. H. J. Tennant, Private Secretary to the Home Secretary; Dr. A. Dupré, F.R.S.; Dr. T. Oliver, Newcastle-on-Tyne; and Mr. H. J. Cameron, Inspector of Factories. Witnesses are being called and manufactories visited. The proceedings are private.

### A Chemical-manufacturer's Difficulties.

In the City of London Court, on Monday, before Mr. Commissioner Kerr, in the case of *Gunn v. Wolff*, the plaintiff sought to enforce payment of the sum of 34*l.* 1*s.* 7*d.*, due from the defendant, Mr. G. G. Wolff, chemical-manufacturer, Calvenley Grove, Hornsey, for goods supplied to him in the way of his trade. Mr. Hurd appeared as solicitor for the plaintiff.

The plaintiff stated that the defendant was well able to pay the debt. He had chemical-works at Holloway, where employed a number of hands.

The defendant denied that that was so. He only employed three or four hands. He had been travelling for 7 weeks for orders, and was being financed by a friend who had recently lent him 20*l.* His friend took more than half the profits for the convenience of the loan, and, in fact, charged him what he liked. He produced a letter from the London and South Western Bank, showing that his account was 18*s.* 8*d.* overdrawn.

Mr. Commissioner Kerr said that did not look like means.

Mr. Hurd said the defendant was constantly advertising for travellers and clerks.

Mr. Commissioner Kerr suggested that the plaintiff should distrain on the defendant's goods.

Mr. Hurd: They are all in the wife's name.

The defendant said he had several other debts, but, like the plaintiff's claim, they were all "bogus." (Laughter.) He owed about 200*l.*

Mr. Commissioner Kerr: Do not talk so, man. Talking is the curse of the present age. (Laughter.) Bring in a list of your debts next Saturday.

The case was accordingly adjourned.

### Curious Poisonings.

Francis Evans, about 2 years of age, whose parents live at Newport, Salop, found a bottle on the window-ledge, which his mother had placed there when she was cleaning out her cupboard. It was believed he drank from it, for he was suddenly taken ill, and died eight hours afterwards. The mother was not aware that the bottle contained poison. It was a solution of chloral.

Peter Beckwith, 27, a labourer, living at Bradley, Yorkshire, went to fetch some milk for his mother. He found two bottles in a stable, one containing "foot-rot lotion" and the other "maggot lotion." He drank from one, but he does not know which. He is still alive.

### Sequah (Limited)—Annual Meeting.

The third annual meeting of this company was held on Friday, October 6, at Winchester House, Old Broad Street, E.C., Mr. S. F. Isitt presiding. We gave particulars of the report and balance-sheet in our last issue. The Chairman, in moving the adoption of the report for the year ending 31st May last, said that he thought the result of the year's trading had not been unsatisfactory. The previous balance-sheet showed a deficiency of 24,000*l.*, which was carried forward, together with a balance of 11,000*l.* spent in advertising. These amounts were written off when the capital was reduced, together with a loss of 11,000*l.* incurred during

the first four months of the present year. The directors started the eight months prior to May with a clean sheet as regards the profit-and-loss account, with the exception of a sum of 414*l.*, which ought to have been dealt with prior to 30th September last. They had, however, liabilities to the extent of 8,300*l.*, but these had been reduced by the end of the year to 3,227*l.* A further considerable reduction had been made since then, while the available cash had satisfactorily increased. After deducting the 414*l.* from the profit of 949*l.*, there was a balance of 534*l.* 15*s.* to carry forward. Mr. Hartley some time ago offered to hand 10,000 of his Ordinary shares over to trustees on behalf of the shareholders, to be sold at the rate of 2*s.* per share. Of these shares 5,526 were sold, producing 552*l.*, which had been used in the business.

Mr. Fassett, in seconding the motion, thought it was useless to advertise at all unless they did it largely, and at present the board could not do that. Orders came in with steadiness for both the wholesale and retail trade all over the country, and to some extent from abroad. As, to asking the shareholders to support some scheme whereby money should be placed at the disposal of the board with a view to advertising, he did not advocate that course at present; but if their business development proved sufficiently continuous to justify the directors in making some such proposal, they might do so on a future occasion.

The motion was carried unanimously. Mr. Eldrid was re-elected a director; but Mr. John Davis did not seek re-election.

### Tired of this Wicked World.

This was John Morris Whittaker's excuse for trying to drown himself in the Thames. John is a chemist, and the Mansion House Magistrate ordered him to find a surety of 5*l.* for his good behaviour, or go to gaol for fourteen days.

### "Sweets to the Sweet."

When the Duchess of York with her husband visited York last week, Messrs. Rowntree and Co. presented her with an artistic box containing a selection of their chocolate confections as specimens of one of the industries of the city. The Duchess, through Lady Eva Greville, has now tendered her "most grateful thanks to Messrs. Rowntree for the magnificent box of chocolates."

### A Young Clerk Steals.

At the City Police Court, Wall Street, Liverpool, on Friday last, a youth named Frank Gould was charged with stealing Valentine's meat-juice, perfumes, &c., to the value of about 27*l.*, from Messrs. Evans, Sons & Co., by whom he was employed as a junior clerk. The detective who had the case in hand reported that he had traced 12 dozen Valentine's meat-juice, out of 13½ dozen missing, to the following firms, who received 4 dozen each:—Goodall, Backhouse & Co., Leeds; J. Brooks, Manchester; and Booth & Openshaw, Blackburn. Gould had offered the article under an assumed name and address, below the manufacturer's lowest wholesale price. He pleaded guilty, and was sentenced to six weeks' imprisonment with hard labour.

### Strychnine Instead of Calomel.

On Monday, Dr. George Danford Thomas held an inquest at the Islington Coroner's Court concerning the death of Charles William Bennett, aged 10 years, son of a jeweller, residing at 28 Denmark Grove, Barnsbury, who was poisoned under the following circumstances. The boy was unwell on Wednesday of last week, and he was taken to Dr. Bower, 81 Barnsbury Road, who prescribed a saline mixture for him, and also gave him what he believed to be a calomel powder out of a stock of such powders that he had made two months previously. The deceased went home, and having been given a dose of mixture went to bed, directly after which his father gave him the powder on his tongue. Some four minutes afterwards he complained to his father that he was stiff all over, and said that he knew he was dying. It being thought that he was in a fit of convulsions medical aid was at once sought, but he died directly afterwards. A *post-mortem* examination showed that death had resulted clearly from strychnine poisoning. Dr. Bower stated that he was unable to tell how the strychnine had got amongst the other powders. He kept his strychnine-



bottle on a high shelf, so that no one could get at it. He took the powder (which he supposed to be a pink aperient powder containing 2 grains of calomel) from a box containing twenty or thirty powders of a similar kind. He himself weighed the materials, and his assistant helped in making the powders up, two months ago.

Dr. Henry Francis Stokes, of 2 Highbury Crescent, who made the *post-mortem* examination, said he examined a paper given to him, and found upon it two or three small crystals which were undoubtedly strychnine. He did not find any strychnine in the stomach. The powder was placed on the child's tongue, and in that case the strychnine would be quickly dissolved, and would never reach the stomach.

The jury returned a verdict of death from misadventure. The Coroner said that for this lamentable death the doctor was not liable to pay compensation, but he had, he might tell the parents, expressed his willingness to assist them in their great trouble.

#### Carbolic-acid Poisoning.

At Charing Cross Hospital on Monday, Mr. John Trontbeck held an inquest on the body of Ingul Kishore Singh, an Indian law-student of the Middle Temple, who committed suicide by taking a mixture of white lead and carbolic acid at the Charing Cross Hotel on Thursday last week. He was a married man and had two children, but had asked his landlady's daughter to marry him. She refused, and Singh became despondent. Hence the suicide.

#### The Sheffield Analyst on Vinegar.

In a report to the Health Committee, shortly to come before the Sheffield City Council, Mr. A. H. Allen, the city and county analyst, makes the following observations on vinegar which he has examined:—"Twelve samples had been received, which were purchased as 'malt vinegar.' Of these, three only were genuine, or of fair quality, and a fourth was of suspicious character. The remainder were factitious articles, made in imitation of malt vinegar, containing but a trifling proportion of real vinegar; in fact, they bore much the same relation to vinegar that margarine bears to butter. One of these was only half the usual strength of commercial vinegar, and four were adulterated with sulphuric acid to the extent of about  $\frac{1}{4}$  per cent. This is a highly objectionable addition, and liable to affect injuriously persons of delicate organisation. The sourness of sulphuric is at least four times that of acetic acid of the same strength, and hence the  $\frac{1}{4}$  per cent. of sulphuric acid found in these samples enabled the manufacturer to dispense with 1 per cent. of acetic acid, or nearly one-fourth of the whole amount present. An article having the sourness of vinegar can be made from sulphuric acid at a cost of 50 gallons for 1*d.*, while the cost of the acetic acid used in substitution of genuine vinegar is itself only 1*d.* per gallon. These prime costs, therefore, leave a handsome profit to the manufacturer who supplies such a sophisticated article to the retailer."

#### Drug-contracts.

The Cirencester Board of Guardians have accepted the following contracts for the Union Workhouse for the ensuing twelve months:—Mr. J. Paternoster, Cirencester, quinine, 2*s.* per oz.; cod-liver oil, 5*s.* per gallon; castor oil, 9*d.* per pint; Mr. H. Moss, crushed linseed, 18*s.* per cwt.; Mr. F. W. Adams, arrowroot, 7*d.* per lb.

The Thetford Board of Guardians have accepted the tender of Messrs. Percival, London, for supply of linseed meal at 1*d.* per lb., and the tender of Mr. H. Webster for the supply of disinfecting soap at 3*d.* per lb.

#### Derby County Analyst.

At the quarterly meeting of the Derbyshire County Council the Weights and Measures Committee recommended that one analyst should be appointed for the administrative county, exclusive of the boroughs of Chesterfield and Glossop, to devote his whole time to the service of the county council, at a salary of 400*l.* a year, together with necessary railway-fares, cab-hire, stationery, and postage. At the same time the committee expressed their appreciation of the two county analysts, Mr. Allen and Mr. Otto Hehner, and added that the termination of their engagement was not due to any dissatisfaction with their work. The recommendation

was discussed at considerable length, and was ultimately rejected.

#### A Prescribing Unqualified Chemist.

An inquest was opened on Monday evening by the Cardiff Coroner (Mr. Reece) on the body of Clara Reynolds, single woman, aged 19, who had died under somewhat singular circumstances. From the evidence of a married woman, named Florence Carney, it appeared that the deceased came to lodge with her on Wednesday, October 4. She was of very intemperate habits, and suffered from hysteria. On Friday night she came home drunk, and next morning complained of a slight headache. She continued to get worse till the evening, when she had a fit of hysterics. Acting on the advice of a neighbour, witness sent for Mr. W. Bateman, trading as a chemist and druggist in Court Road. After he had seen the deceased, witness asked him if it was necessary to send for a doctor, and he replied, "Not at all, she will be all right in the morning; she is only suffering from hysterics." He made up a draught for the deceased, which she drank. She immediately vomited part of it, and afterwards fell asleep. Witness slept with her that night. She was very restless, and threw her arms about very much, and when witness awoke about half-past 11 in the morning she found the deceased dead.

Mr. W. Bateman was called, and after being cautioned by the Coroner, he said that when he saw deceased he did not consider she was in a dangerous condition, or that medical aid was necessary. He thought the woman was suffering from excessive drinking, and gave her a draught which contained carbonate of soda, bicarbonate of potash, and aromatic spirits of ammonia. In answer to the Coroner, witness said he was not a registered chemist.

Dr. Raymond said when he saw the deceased about half-past 11 on Sunday morning she was quite dead. He believed she had expired about two hours before. In his opinion death was due to failure of the heart's action, consequent on fatty degeneration. He had seen the prescription, and he did not think there was anything injurious in it.

The Coroner: Do you think if medical assistance had been summoned the girl's life would have been saved?

Witness: I cannot answer that question without previously making a *post-mortem* examination.

The Coroner said if the jury desired he would adjourn the inquiry in order that such examination might be made.

The jury thought it would be better to do so.

The inquiry was then adjourned till Tuesday evening, when Mr. Beynon Harris, solicitor, appeared on behalf of the Medical Defence Union.

Dr. Raymond said he had made a *post-mortem* examination that morning. He found all the organs healthy, except the heart and kidneys. The heart was in an advanced state of fatty degeneration, and the same process had commenced with the kidneys. In the stomach there was a little partly-digested food, but it was impossible to tell what it was. There was no evidence of any irritant poison having been taken. Death resulted from failure of the heart, due to fatty degeneration, brought on by alcoholic excess.

The Coroner: Is it possible that if the deceased had been attended by a medical man her life might have been saved?

Witness: It is probable. The disease from which she suffered could only have been detected by a medical man after careful examination.

The Coroner: Of course she could not have been cured, but her life might have been prolonged?

Witness: Oh yes; she might have lived for some years.

Mr. Harris: Do you consider that through the administration of the dose prepared by Bateman death was at all accelerated?

Witness: No; not from the prescription I have seen.

Mr. Harris: Then she might have died at the same time, even if she had not had the dose?

Witness: Yes.

The Coroner said the conduct of Bateman was most reprehensible, and if the doctor could have said that the medicine which he gave the woman had any ill effect on her, the jury would have had to bring in a verdict of manslaughter against him. Ignorant people sometimes called in a druggist, and relied upon him as much almost as if he were a doctor; but Bateman had not the slightest right to act even as a chemist. He had committed an offence against the



law by attending and prescribing for this woman, and though he was not legally responsible for her death, he was morally, because if he had not given the advice he did to Mrs. Carney she might have sent for a doctor, and the deceased's life might have been saved.

The jury returned a verdict that the death of the deceased was due to natural causes; but they considered that Bate-man ought to be severely censured for taking upon himself to visit and prescribe.

The Coroner: I think it was a scandalous thing for him to do. He is morally guilty of this poor woman's death.

#### Mr. Fernando's Debts.

Mr. Frank Fernando came before his Honour Judge Lumley-Smith, Q.C., on Tuesday, to explain why he had not complied with an order for payment of a debt made in accordance with his own offer. Mr. Fernando once again narrated his difficulties, and his Honour made an order for payment of the debt in two months.

#### An Analytical Chemist's Debts.

In the Westminster County Court on Tuesday, the case of Hunt v. Auchinachie was before his Honour Judge Lumley-Smith, Q.C., by way of a judgment summons to enforce payment of a debt due under an order of the Court. The plaintiff's solicitor said the debtor held a good position as a professional analyst, and there was not the slightest doubt as to his ability to pay the money, therefore the plaintiff asked for a committal order against him. The debtor did not put in an appearance, and his Honour, having heard evidence as to means, made an order for his committal to Holloway for twelve days, but suspended the warrant for one month.

#### The Epps's Cocoa Frauds.

At Bow Street Police Court on Monday, William Fairweather, a lithographic printer, was charged, on remand, with being concerned with two others—Morris and Hughes (the persons previously referred to in reports of this case)—in forging the trade-mark of Messrs. Epps, cocoa-manufacturers, and he was also charged with the actual forgery. Mr. Blanchard Wontner stated that Detective-Inspector Baker, of Scotland Yard, had ascertained that prisoner printed the labels at an office in Church Passage, Chancery Lane, the proprietor of which allowed him to work there, having known him in better days. Evidence having been given, prisoner was committed for trial.

#### Hunting Cholera Bacilli.

The London County Council at their meeting this week had a brief experience as to bacteriological-examination fees. The Health Committee recommended that Dr. Klein should continue to examine bacteriologically all suspected cases of cholera in London, at the rate of 10 guineas each for the first fifteen cases, and then at 5 guineas each case more. Dr. Collins suggested that as Dr. Klein had been retained in a similar capacity by the Local Government Board, and was, moreover, something of a heretic on the subject of the comma bacillus, one of the London County Council officers should do the work. The Council agreed, however, to the Health Committee's recommendation.

#### Long-firm Frauds.

Messrs. W. Sharratt & Co., chemists, Droylsden, Manchester, are amongst the victims of a gang of alleged swindlers now under trial at Birmingham. The persons, four named Stevens, and one Kaiser, traded in Birmingham under the style of Messrs. Kendrick, St. Paul's Square; Messrs. Wade, Frederick Street; and Messrs. J. & E. Ludlow, Ludgate Hill. Sharratt & Co., sent a large quantity of soap to Ludlow's, relying upon the character given by "Kendrick." It is alleged that this was the style of the prisoners' way of doing business all round, and many hundreds of pounds' worth of goods were obtained from various firms. The prisoners have been committed to the Sessions.

#### Fire.

A fire, the cause of which is not known, occurred among some hampers in the cellar under the chemist's shop of Mr. Spurr, Folly Hall, Huddersfield, on Tuesday morning. It was soon mastered.

#### They "Boned" the Fish-carver.

The premises occupied by Mr. W. Harris Jones, pharmaceutical chemist, at 4 Maclise Road, West Kensington, were recently broken into. Mr. Jones disturbed the depredators, who made off. It was then found that they had got in through the kitchen window. They bent a number of spoons, but left them behind, and helped themselves to some refreshments at Mr. Jones's expense. After their hurried escape the only article missing was a silver fish-carver.

#### Claim against Miss Ruppert: The Dublin Prosecution.

In the Westminster County Court, on Wednesday, his Honour Judge Lumley Smith, Q.C., had before him the case of Brand v. Ruppert, in which plaintiff sought to recover a share of profits alleged to be due to him from the defendant, Miss Anna Ruppert, who was said to be the owner of a speciality for the cure of diseases of the skin, and who had recently been prosecuted in the Dublin Police Court for having sold what was alleged to be a poisonous drug. Prior to the facts of the case being gone into, counsel for the defence said he had to apply for an adjournment on the ground that his client was now in America, and would be unable to return to England for some few weeks in consequence of a very serious illness. On behalf of the plaintiff, the application was strenuously objected to, on the ground that no sufficient reason had been shown, and that no medical certificate had been produced in support of the alleged illness of the defendant. It had been admitted that a sum of something like 15*l.* was due to the plaintiff, but his contention was that he was entitled to a much larger amount; and as this lady had recently been prosecuted, and fined 5*l.*, in the Dublin Police Court, for illegally selling a poisonous compound for the cure of diseases of the skin, plaintiff was very anxious to get his money as soon as possible. Defendant's Counsel: The fact of her having been fined 5*l.* does not in any way go to show that she is not in a position to meet her liabilities. Plaintiff's Counsel: No; especially when she sold the preparation at 10*s.* 6*d.* a bottle, and its cost was only about  $\frac{1}{2}$ *d.* His Honour: We need not go into that. I don't see why the defendant should not have an adjournment under all the circumstances; but, of course, it must be upon terms. If she pays 25*l.* into court, that will about cover the amount which it is admitted is owing, and also the costs which have been incurred; and on those conditions being complied with, the case will stand adjourned.

## Irish News.

#### Pharmaceutical Society of Ireland.

*Preliminary Examination.*—The following have passed:—Messrs. W. H. Howe, W. Meeke, G. L. Wray, D. A. Taylor, R. J. Livingston, W. A. Ross, J. J. Foley, J. Anderson, J. S. Corcoran, F. C. A. Scott, and W. M. Scott. Four were rejected.

*Pharmaceutical Licentiate Examination.*—Messrs. M. Johnston, T. H. Walshe, W. Wright, J. J. McHugh, W. Jordan, J. J. McMahon, J. R. Corrigan, and J. Hughes. Two were rejected.

We are unable to print the questions owing to pressure on our space.

#### Looking for Methylated Tinctures.

Two Somerset House chemists have been engaged in Belfast and neighbouring towns during the past two weeks examining the tinctures, &c., of chemists, to find if methylated spirit is being used. Up to the present we have not heard of any detections.

#### A Vinegar-case.

At the Enniskillen Police Court, on October 9, Sergeant Sheridan, inspector under the Food and Drugs Act, charged Messrs. Cox Brothers with selling vinegar which, according to the certificate of Sir Charles Cameron, public analyst, consisted chiefly of distilled and not fermented acetic acid. The defendants were fined 1*l.* and 10*s.* costs by a majority of the Magistrates.



## Drug-contract Open.

The Board of Guardians of the Tralee Union invite tenders for the supply of medicines and surgical instruments to the workhouse and six dispensary districts, and will consider same on Wednesday, October 18.

## Scotch News.

## A Heated Flue.

A fire, caused by the overheating of a flue, occurred on Friday last week in the shop of Mr. Jas. Wilson, chemist, 116 Nicolson Street, Edinburgh. It was extinguished, however, before much damage was done.

## He had no Beer-licence.

In the Aberdeen Justice of Peace Court, on Wednesday, October 4, Marshall Thomson, chemist, Ballater, was charged with having on May 28 last sold two pints of stout, and again, in June last, one dozen pints of beer. Accused denied the charge, and was defended by Mr. D. Sinclair, solicitor. After evidence had been led, the charges were found proven, and a fine of 7*l.* imposed, with 3*l.* of expenses, the alternative being one month's imprisonment.

## Local Secretaries.

The Secretary of the Pharmaceutical Society has suggested that meetings of the adherents of the Society should be held at this season for the selection of local secretaries. Mr. Alex. Strachan, Local Secretary for Aberdeen, who has just returned from a trip to Canada and the United States, has called a meeting "of the electorate" for Saturday, at 11.30 A.M.

## Hellebore for Liquorice Powder.

Last week, Miss Emma Fraser, a young lady 26 years of age, residing with her brother-in-law, the Free Church minister of Petty, near Inverness, who had been suffering from a severe cold, intending to take liquorice powder, by mistake swallowed some hellebore. On discovering her error, Miss Fraser partook of the remedies which she found prescribed in a book of medicine, while Dr. Strother, Balmachree, and Dr. Corbet, Ardersier, were sent for with all speed. The poison, however, had laid hold of the system, and the young lady succumbed to its effects about four hours after partaking of the dose.

## French Pharmaceutical News.

(From our Paris Correspondent.)

**HOW CIGARETTE-PAPERS WERE MADE**—The servants of one of the principal Paris hospitals (the Lariboisière) have had a nice perquisite for many years in refuse cotton-wool and lint. This they sold to scavengers, who in turn sold it to those who make cigarette-papers. A stop has now been put to this, and large furnaces have been erected for the cremation of the old dressings and ward-sweepings.

**M. PASTEUR'S ALBUM.**—When last December 27 all the learned men in Paris met together at the new Sorbonne to do honour to M. Pasteur, the Paris Municipal Council presented an address to the illustrious chemist in the name of the city. The Council has amplified its original idea into an album containing a reproduction of the address beautifully illuminated in the Renaissance style, by a leading artist. The arms of the city figure at the top on the left. Underneath, and in an ingeniously-arranged framework, surrounded by branches of oak and golden laurels, the year of the Jubilee appears in red. The remaining decoration is composed of elements typical of the sixteenth century, the colours being set off with gold. The vellum has been placed in a highly-artistic binding of red Morocco leather, also bearing the arms of the city of Paris. The whole is generally considered to be a remarkable specimen of a somewhat neglected art, and has given much pleasure to M. Pasteur.

**MUSHROOM SPECIES.**—A well-known naturalist, Professor Bourquelot, of the Paris School of Pharmacy, has made a special study of the mushroom species, and results of his researches have at various times been published in *THE CHEMIST AND DRUGGIST*. At the Academy of Sciences last week a paper by him was read on the same subject. He finds that parasitical mushrooms produce a soluble ferment analogous to emulsin—that is to say, possessing the property of dissolving various glucosides, such as amygdalin, salicin, coniferin, and phlorizin. This ferment may be obtained in the ordinary manner by precipitation, by the aid of pressed alcohol, of mushroom sugar. Willow-trees, of which the trunks are frequently attacked by polypores, contain salicin. On the trunks of poplars, too, an eatable mushroom develops, well known in certain parts of the South of France as *piboulade* (*Pholiota ergerita*). Apple-trees are frequently attacked by a polypore and contain phlorizin. The pine-tree produces coniferin. Consequently, adds M. Bourquelot, it may be supposed that, owing to this ferment which they secrete, all parasitical mushrooms can utilise these glucosides, which, under its influence, produce glucose among other products.

**THE STERILISATION OF MILK.**—Dr. Budin, professor of obstetrics at the Paris Faculty, has recently given much attention to the question of bringing up infants on the bottle. He especially criticises the use of milk in the ordinary way, and refers to it in bacteriological terms as "an excellent bouillon for culture." Dr. Budin considers the most dangerous feeding-bottle to be that fitted with a long tube of glass and indiarubber. This invariably contains, in spite of all possible care, numerous colonies of microbes at the end of a few days. At the present time this form of bottle is condemned by the Paris Academy of Medicine, and its use has been officially prohibited throughout France. In the obstetrical service at the Charity Hospital ordinary medicine-bottles are used, to which is adapted a special instrument suggested by Dr. Budin, and called *galactophore*. It is made as follows:—Two connected tubes are passed through an indiarubber stopper; one, larger than the other, enables the milk to flow, while the second, being very small, serves as a passage for air. An indiarubber teat, with a flat ring made of bone, completes the apparatus. The bottle is filled with milk and closed by the stopper, after which it should be turned upside down, and the nipple placed between the child's lips. As soon as the latter sucks, the liquid enters its mouth. The tube destined as an air-passage should be very small; in this way the milk cannot escape, and it does not descend too rapidly. Whatever kind of apparatus is used, frequent cleansing with boiling water is necessary to prevent the formation of germs. Dr. Budin considers that milk sterilised at 80° C. is perfectly safe for use during the next twenty-four hours. For domestic sterilisation of milk he recommends an apparatus resembling Soxhlet's.

## Gazette.

## PARTNERSHIPS DISSOLVED.

Devane, M., Crowe, W., and Atkinson, G., under the style of Devane, Crowe & Co., so far as regards G. Atkinson, Liverpool, ink manufacturers and drysalers.

Jones, B. S., and Jones, T. S., under the style of Shakeshaft, Jones Brothers, Wirksworth, Derbyshire, coal tar distillers and rectifiers, liquid ammonia and asphalt makers.

Molloy, T., and Roberts, T. A. L., under the style of Molloy & Roberts, Manchester, dental surgeons.

Wiles, W., and Bodilly, R. T. H., Woodbury, Wanstead, and Grove Road, Woodford, surgeons and apothecaries.

## THE BANKRUPTCY ACTS, 1883 AND 1890

## ADJUDICATIONS.

Long, Thomas George, Ha Hertsfield, grocer.

Lyons, Alfred de Courcy, Blagdon, Somerset, Bachelor of Medicine.

## SCOTTISH BANKRUPT.

Rait, Andrew Elder, Glasgow, medical glass-bottle merchant.—Creditors will meet in the Faculty Hall, St. George's Place, Glasgow, October 17, at 12 o'clock. William & Curswell, 121 Bath Street Glasgow, agents.



## Pharmaceutical Society of Great Britain.

### EXAMINATIONS IN LONDON.

WE have received from the Registrar of the Pharmaceutical Society of Great Britain the following list of candidates who were granted certificates at the October meeting of the London Board of Examiners:—

#### MAJOR.

Arrandale, John Samuel, Denton  
Bray, Frederick Richard, Horncastle  
Garner, James Norman, London  
Horrell, Wm. Fokett Edward,  
Crediton

Norwood, John Percy, Doncaster  
Riley, Joseph Arthur, Seaforth  
Sage, Charles Edward, Frome

#### MINOR.

Anderson, George William, Thirsk  
Baker, Frank, Towcester  
Barker, Arthur Brook, Mirfield  
Budworth, James Phineas, Derby  
Cox, Harry Bertrand, Shepton  
Mallet  
Cross, Herbert Francis, Cambridge  
Davies, David John, Swansea  
Davies, John, St. Clears  
Davies, Robert Fisher, Pontardawe  
Dennis, Ernest Edwin Gascoigne,  
Louth  
Dukes, Edward Thomas, Penkridge  
Dunford, Oswald Fred., Llynchys  
Dunn, Henry Benjamin, Gains-  
borough  
Dyson, Herbert, Derby  
Elliott, Oliver Thomas, Leicester  
Gibson, Robert Roxburgh, New-  
castle-on-Tyne  
Goft, Thomas Summers, Hand-  
sworth  
Harris, John Elinton, Bournemouth  
Howells, Gwilym Harries, Brecon  
Hughson, Alexander Sinclair, Bath  
Johnson, Harrison Percy, Prestwich  
Johnson, Walter, Birmingham  
Jones, John Monk, Aspull  
Jones, Thomas, Llandysul  
Kellett, Thomas Henry, Bishop  
Auckland

Lake, John William, Exeter  
McFadden, Wilfred Edgar, Walter,  
Southsea  
Newton, Augustus, London  
Owen, Evan Thomas, Conwil  
Peat, Samuel, Mansfield Woodhouse  
Phillips, Francis Daniel, Haverford-  
west  
Pole, Miles Walker, Edinburgh  
Price, Charles Hedley, Leominster  
Pritchett, William Edward, Chel-  
chester  
Read, Thomas, Bristol  
Roberts, Walter John, Bath  
Saller, Frank William, Ipswich  
Sarson, Arthur John, Leicester  
Sherwood, Joseph Henry, Withing-  
ton  
Simpson, Arthur, Huntingdon  
Smith, John Thomas, Gateshead  
Smith, Richard Theodore, Raibon  
Spencer, Frederic, Uttoxeter  
Tarry, William Ambrose, Derby  
Thorpe, Albert, Boston  
Townsend, Percy, Riding Mill  
Watkins, David, Pentrych  
Wells, William Luty, Louth  
Wheeler, Henry William, London  
Wicks, Harry Gilbert, Keswick  
Wildman, Harry George, Feltham

#### MODIFIED EXAMINATION.

Bedells, Arthur, London

#### FIRST OR PRELIMINARY EXAMINATION.

THE following are the questions given on Tuesday, October 10:—

##### LATIN.

(Time allowed—from 11 A.M. to 12.30 P.M.)

I. For all candidates. Translate into Latin:—

1. We praise the work of one man.
2. The voices of the judges will be heard by the boys.
3. The one built the wall, the other the city.
4. No one doubts that he will come.
5. Having conquered the enemy, Caesar returned on the first day of the year.

II. Translate into English either A (Caesar) or B (Virgil).

(Candidates must not attempt both authors.)

##### A. CAESAR.

1. His responsis ad Caesarem relatis iterum ad eum Caesar legatos cum his mandatis mittit: Quoniam tanto suo populoque Romani beneficio affectus, cum in consulatu suo rex atque amicus a senatu appellatus esset, hanc sibi populoque Romano gratiam referret, ut in colloquium venire invitatus gravaretur neque de communis re dicendum sibi et cognoscendum putaret, hanc esse, quae ab eo postularet: primum ne quam multitudinem hominum amplius trans Rhenum in Galliam traderet.

2. Postquam in vulgus militum elatum est, qua arrogantia in colloquio Ariovistus usus omni Gallia Romanis interdixisset, impetumque in nostros ejus equites fecissent, eaque res colloquium ut diremisset, multo major alacritas studiumque pugnandi majus exercitui injectum est.

Grammatical Questions.—For those only who take Caesar.

1. Give the genitive singular and the gender of all Nouns in Paragraph 2
2. Account for the moods of the following Verbs, and give the principal parts of each:—*mitti, referret, venire, putaret, traderet* (Paragraph 1).
3. Decline in full the Relative and Interrogative Pronouns in Latin.
4. Write out a complete list of Prepositions found in Paragraph 1, and show what cases they govern. Account for the difference between *in conspectu* and *in Galliam* (Paragraph 1).

##### B. VIRGIL.

1. Vix e conspectu Siculae telluris in altum  
Vela dabant laeti et spumas salis aere rubeant,  
Cum Juno aeternum servans sub pectore volnus  
Hæc seecum: "Mene inepto desistere victum?  
Nec posse Italia Teucrorum avertere regem?  
Quippe vetor fatis. Pallasie exure classem  
Argivum atque ipsos potuit submergere ponto.  
Unius ob noxam et furias Ajaxis Olli?"
2. Quis te, nate dea, per tanta pericula casus  
Insequitur? quæ vis immanibus applicat oris?  
Tunc ille Aeneas, quem Dardanio Anchisæ  
Alma Venus Phrygiæ genuit Simoentis ad mædam?  
Atque equidem Teucrum memini Sidona venire  
Finibus expulsum patriis, nova regna petentem  
Auxilio Belli; genitor tum Belus opimam  
Vastabat Cyprium et victor dicione tenebat.

Grammatical Questions.—For those only who take Virgil.

1. Give the genitive singular and the gender of all Nouns in Passage 2.
2. Give the principal parts of all the Verbs in Passage 2.
3. Decline in full the Relative and Interrogative Pronouns in Latin.
4. Write out a complete list of Prepositions found in Passage 1, and show what cases they govern.

##### ARITHMETIC.

(Time allowed—from 12.30 P.M. to 2 P.M.)

(The working of these questions, as well as the answers, must be written out in full.)

1. How many square yards of glass will be required to glaze 3 windows, each having 4 panes, each pane measuring 2 ft. by 1 ft. 3 in., and 5 windows, each having 4 panes, each pane measuring 2 ft. 3 in. by 1 ft. 6 in?
2. Find the difference between  $3\frac{2}{7}$  of 2 gr. 25 lb., and  $\frac{25}{2}$  of 4 ewt. 2 gr. 20 lb.
3. Find the value of  $259$  of 16s.  $10d.$  +  $0312$  of 12s. 10s.
4. If a bankrupt, whose whole possessions amount only to 625*l.* 13*s.*, pays a dividend of 1*s.* 3*d.* in the pound, what does he owe?
5. Write out the Metric Table of Capacity; and give approximately the equivalent in English measure of 3 décalitres.
6. If 5 men and 7 boys can reap a field of corn of 125 acres in 15 days, in how many days will 10 men and 3 boys reap a field of 75 acres, each boy's work being half that of a man?
7. The price of Consols being  $88\frac{1}{2}$ , how many railway shares, the market price of which is 8*l.* 15*s.*, can be purchased for 1,000*l.* Consols?

##### ENGLISH.

(Time allowed—from 3 P.M. to 4.30 P.M.)

1. Analyse:—

"The stag at eve had drunk his fill  
Where danced the moon on Monan's rill,  
And deep his midnight lair had made  
In lone Glenartney's hazel shade."

2. Parse fully:—*He thinks nobody should be sad but I.*

3. Give words formed by the following suffixes (one from each), and explain the force of each suffix:—*-age, -ish, -less, -en, -some, -hood.*

4. In the following passage supply the necessary capital letters, and put in the stops and inverted commas where necessary:—*madame knows best said ivan who sat opposite to her quietly rolling cigarettes and smoking then as if to do so was his one chief duty in life we know madames history said paul why repeat it in our presence have our friends asked anna turning to ferrari and then glancing at the three persons unnamed been made acquainted with our victory at venice.*

\*5. Write a short composition on one of the following subjects:—

- (i.) Strikes.
- (ii.) The instincts of birds.
- (iii.) The House of Lords.
- (iv.) "Thrice is he armed that hath his quarrel just."

\* This must be attempted by every candidate.



## Pharmaceutical Society of Ireland.

THE first monthly meeting of the new Council was held on October 4. The members present were:—Mr. William Hayes (President), Messrs. Beggs (Vice-President), Hodgson (Treasurer), Wells, Lyons, Grindley, Dr. Burnes, Merrin, Murray, Gibson, C. Evans, Whitla, Johnston, Montgomery, Conyngham, Professor Tichborne, and Boyd.

The REGISTRAR (Mr. Ferrall) read the minutes of the September meeting of the Council.

### ELECTION OF A PRESIDENT.—A BREEZY DISCUSSION.

The election of President for the ensuing year being the next business, Mr. Hayes asked if the Council wished him to leave the chair. Dr. Burnes and Mr. Grindley asked him to retain it.

Mr. GRINDLEY then proposed that Mr. Wells should be President for the ensuing year.

Mr. MONTGOMERY seconded the nomination.

Mr. CHARLES EVANS proposed that Mr. Hayes be re-elected. He said: I am sure Mr. Wells will not take this as unkind on my part. I endorse everything that Mr. Grindley and his seconder have said about Mr. Wells. No gentleman of this board knows more intimately than I do the trouble and the time that Mr. Wells has devoted to the Society; but having regard to the time and the ability that Mr. Hayes has also devoted to the Society during the past year, and also to the circumstance that his term of three years is not up, I think it is only due to him that we should retain him as President of the Society for 1893-94.

Mr. HODGSON: No one at this board has a greater respect for Mr. Wells than I have. I ought to regard him very tenderly indeed, for his father was my senior fellow-apprentice many years ago. I must give Mr. Wells the credit of taking a very deep interest in our Society, and I should be very glad to see him President. But Mr. Hayes was obliged in consequence of a domestic affliction to go to Australia, and that took him away from the chair of the Society for many months; and where he has devoted so much time and energy to the welfare of the Society I think it would be a gracious thing to allow him to complete the term of three successive years in office, which I won't say is imperative, but which has become almost an established practice as regards our Presidents. I hope my friend Mr. Wells will take my proposal in good part. I shall be very glad to see him in the chair afterwards.

Mr. CONYNGHAM: I have been taken very much aback about this matter. I on several occasions asked my old friend Mr. Wells would he take the chair, and he said positively he would not take it. On Monday last he told me twice that he would not take it, and now I find he has allowed himself to be proposed.

Mr. WELLS: Is it fair for a gentleman to get up and make that statement? Mr. Conyngham has no authority for what he says.

Mr. CONYNGHAM: I have. You with your own lips told me that you would not take it.

Mr. WELLS: Have I stated to-day that I would take it?

Mr. CONYNGHAM: Oh, I am not prepared to meet such words.

Mr. WELLS: I never spoke to Mr. Conyngham at all, and it is very hard for him to say that I said to-day I would take it.

Mr. CONYNGHAM: I did not say that. I said on Monday.

The VICE-PRESIDENT: Let me answer Mr. Conyngham's insinuations by saying that it was only after extreme pressure had been put on Mr. Wells that he was induced to allow his name to go forward to-day.

Mr. WELLS: It is hardly even with my permission that it has been put forward, because I said I would not allow it.

Mr. LYONS: I was one of those who used very great pressure upon Mr. Wells to allow his name to go forward. I did so because I was asked to do so by several very distinguished members of the Society outside. I had letters both here and in Belfast, asking me to try to induce Mr. Wells to allow his name to be put forward; but up to this morning Mr. Wells gave an emphatic "No" to everything that I said.

The PRESIDENT: I think that is a very satisfactory answer to what Mr. Conyngham has said.

Mr. CONYNGHAM: Yes.

Mr. LYONS: I don't think anything is to be gained by making a personal attack on Mr. Wells.

Mr. CONYNGHAM: It was not a personal attack at all. It was the very reverse of a personal attack.

Dr. BURNES: We all understand Mr. Conyngham's remarks to mean that up to to-day Mr. Wells did not intend to allow himself to be put forward. I am quite sure that Mr. Wells represents a certain class of opinions that are not, I trust, those of the majority of the Council.

Mr. WELLS: Question.

Dr. BURNES: I think Mr. Wells's desire is to maintain the position of the pharmaceutical chemists as far as in his power lies; but the time has come, I think, when the Society must expand its views and become a little more liberal.

Mr. WELLS: As a point of order.

The PRESIDENT: Let Dr. Burnes speak.

Dr. BURNES: The time has come when this Society must expand its views, both in reference to the pharmaceutical chemists and the associate druggists. I believe that in re-electing our President we shall be getting a gentleman who will consistently endeavour to expand the views of the Pharmaceutical Society. I trust that there will be no doubt at all about the election. I hope Mr. Hayes will be re-elected, because we want a man in the chair who will be in touch, not only with the pharmaceutical chemists, but also with the chemists and druggists and the associate druggists, so that we may become a united body, determined to advance the interests of the Society.

Mr. CONYNGHAM having made a further brief explanation,

Professor TICHBORNE, as a personal friend of Mr. Wells, who, he thought, was one of the most valuable members on the Council, said he considered it would be very ungracious to Mr. Hayes if they were to hurry up Mr. Wells to the chair. On this occasion he should feel compelled to vote for Mr. Hayes.

The PRESIDENT: Well, gentlemen, perhaps it is now my turn to speak, and I do so with a great deal of diffidence. I have been requested to allow myself to be nominated for next year; and as regards the three-years' rule—whether it be a law or only an understanding—nothing would induce me to transgress it. Although I have been nominally two years and a half in the chair, I have in reality occupied it for only two years; and I therefore felt that if the Council wished to retain me in that position, I should be doing wrong if I refused the honour. Personally, I do not care for it. It has been to me a matter of considerable personal trial to occupy the chair during the last two years. I am not referring to any unpleasantness that occurred here. When first placed in the chair I felt a diffidence which I have overcome to some extent, but not to such an extent as to make it comfortable for me to be President of the Society. I have held the office entirely against my own wish, and for the sole purpose of, as far as it should be in my power, advancing the interests of the Society; not that I did not feel that others might have filled the office equally well, but I felt that I should have been wrong in declining the responsibility. I should now gracefully retire from the position of being a candidate not unanimously selected, were it not that I have the same strong feeling at the present moment with reference to some matters in connection with this Council that I hope in a few months may have blown over. I am sure Mr. Wells would prove a better President than I have been; though I must say that since I have occupied the chair it has been my earnest desire to hold the balance even between all the parties who were apparently holding opposite views, and I think that to a certain extent I have succeeded. At present I should prefer to retire, but if the Council think I can serve the Society I am willing to abide in my present position. Not that I would not much rather see Mr. Wells in it. I think he has earned it in a way in which I should be unable to earn it. He has fought for the Law Committee in a way that I could not possibly have done, and during my term of office I have considered him to be my right-hand man in everything that concerned law and law proceedings, and he has acted with an ability that I think no other member of the Council could have rivalled. Perhaps Mr. Wells may have something to say.

Mr. WELLS: Oh, no. I don't wish to say anything at all.



There are things Dr. Burnes has said, but I will treat them with silence. I will try whether I have the confidence of the druggists as well as the pharmaceutical chemists. I have had many letters from druggists asking me to protect them; and I feel keenly that Dr. Burnes should have made the statement he did, as if I were not in the confidence of the licentiates and associates all through.

The PRESIDENT: I did not understand him to say that.

Mr. WELLS: I don't know what he referred to, but he certainly did say that I had not the confidence of the druggists. Only a few days ago I had a letter from a well-known gentleman in the drug-trade asking me to assist him in matters connected with the body; and at the last election I was up for a large number of druggists voted for me and wrote letters to me showing that they had confidence in me. I will just say now that when I came here to-day I refused over and over again to let my name go forward, but it was pressed upon me that it was the wish of our friends in the North of Ireland and of others that I should do so, and I was told that I had no right to shirk the responsibility. I said I would leave myself in the hands of my friends on the Council. Personally I have no ambition for the position.

Dr. BURNES: I have no objection to repeat what I said. It is my belief.

Mr. WELLS: As to my not being in touch with the majority of persons throughout the country—

Professor TICHBORNE: Cannot we vote on this question without—

Dr. BURNES: I repeat it again.

Mr. WELLS: How do you know whether I am or not? I think it is not fair to make a statement like that.

Dr. BURNES: I have had communications from the country.

The PRESIDENT: I am quite sure that Mr. Wells stands *Al* with all our constituents in the country. Of that I have no doubt whatever. I will now vacate the chair, and ask Professor Tichborne to take it.

Professor Tichborne took the chair, and put Mr. Evans's amendment for the re-election of Mr. Hayes as President. On a show of hands it was carried by 7 votes to 6, the Chairman and candidates not voting.

The PRESIDENT said: Gentlemen, I am very much obliged to you for the honour you have done me. As I said before, I should much prefer that Mr. Wells occupied the position, particularly as I have not had your unanimous votes. It will, of course, make my position the more difficult, since I feel that nearly half of the Council would prefer me to be elsewhere. However, I am not going to let duty be interfered with by my personal feelings, and therefore I accept with thankfulness the honour you have bestowed on me.

Mr. WELLS: I should like to say, Mr. President, that I am perfectly satisfied with the result of the poll. I had no ambition to be President; but a large number of licentiates and members of the Society said they thought that Mr. Hayes having occupied the chair for two years and a half, it was not competent for him to go up again. I think the rule binding, though it has not passed the Privy Council; and I was of opinion that consistently with that rule Mr. Hayes could not be re-elected. I came to-day with the intention of proposing another gentleman; but my friends got round me, and I allowed my name to be put forward.

The PRESIDENT: I have stated that nothing would induce me to remain in the chair for longer than the period mentioned. I have been but two years in office.

Mr. WELLS: Excuse me—two and a half years.

Mr. MONTGOMERY: In consequence of one remark that fell from the President, I beg to say that we, the minority, will not do anything save to support the chair in future. I hope the President will not have the feeling towards us that he seems to insinuate.

The PRESIDENT: I thank you very much, Mr. Montgomery, for your kind words. Of course it will be a great help to me to feel that even those who did not wish me to occupy this position will loyally support me through my period of office. I must say that I did not look who voted for and against me, and I don't act upon guesswork.

Mr. WELLS: I don't think you escaped noticing those who voted against you. I don't think that's at all likely.

Professor TICHBORNE: Let us pass on to the next subject. Next year we will put Mr. Wells into the chair.

Mr. WELLS: That is what several gentlemen said this time two years ago.

Professor TICHBORNE: Before Mr. Hayes accepted the office I myself asked you to become President.

#### ELECTION OF VICE-PRESIDENT.—ANOTHER GALE.

Dr. BURNES proposed, and Professor TICHBORNE seconded, that Mr. Beggs be appointed Vice-President. Mr. LYONS having spoken in support of the motion it was put from the chair and carried unanimously; but Mr. BEGGS said he was very thankful for the honour conferred on him, but he did not think he would accept the office. He had never been consulted during the year on any one subject or point, and when the chair was vacated a while ago he was passed over although he was Vice-President, and a member of the Council was put into the chair.

Dr. BURNES: Professor Tichborne is an ex-President.

Mr. BEGGS: I do not think it was paying the Vice-President a very gracious compliment, and therefore I place the keys on the table and resign the position.

The PRESIDENT said it was perhaps an oversight on his part, and Professor TICHBORNE said if he had thought of the point raised by Mr. Beggs, he would not have taken the chair.

Mr. BEGGS said that what had occurred that day was but a small matter; but during the whole year he was never consulted about one single iota. When the President was leaving for Mecca or Jerusalem, or wherever he spent the couple of months, he (Mr. Beggs) had to go to his office for the keys of the safe. It would have been but common courtesy on the part of the President to have come with the keys to the person whom he was leaving in his place. He had to go to the President and ask him was there anything that he wished him to do. He felt very keenly the way he was treated: nevertheless he attended all the Council-meetings regularly, and did all he could for the Society.

The PRESIDENT having replied to this, Mr. GIBSON remarked that he thought these personal wrangles were unbecoming to the dignity of the Society. They should rise a little above this sort of thing. This brought up Mr. WELLS, who said no one could speak at all without his remarks being considered personal; and Mr. WHITLA, who, though very loth to add fuel to the fire, described Mr. Gibson's remarks as most uncalled-for. Mr. Beggs was perfectly justified in explaining his reasons for resigning. After a few more speeches Mr. Gibson withdrew his remarks.

At the request of Dr. Burnes, Mr. Hodgson, and the President, Mr. Beggs consented to accept the Vice-Presidency.

On the motion of the PRESIDENT, seconded by Mr. GRINDLEY,

MR. HODGSON WAS RE-ELECTED HONORARY TREASURER with unanimity, and without any rhetorical difficulties.

Mr. HODGSON, in thanking the Council for the vote, paid a high compliment to the care and accuracy of Mr. Ferrall, the Registrar.

#### AUDITORS.

On the motion of Dr. BURNES, seconded by Mr. CHARLES EVANS, Messrs. Grindley and Simpson were re-elected auditors.

#### COMMITTEES.

On a motion to re-elect the Law Committee, Mr. GIBSON moved that Mr. Turkington should take the place on that committee which had been created by the retirement of Mr. Sunner. Mr. WELLS objected, and proposed Mr. Bernard. Mr. CONYNGHAM seconded, remarking that if a druggist were put on the committee it should be Mr. Boyd. Mr. Wells's motion was carried. The Law Committee was therefore constituted as follows:—Messrs. Conyngham, Downes, Charles Evans, Grindley, Montgomery, Wells, and Bernard.

The Certificates Committee, consisting of Messrs. Conyngham, Evans, Grindley, and Simpson—with the addition of Mr. Bernard—were re-elected.

The House and General Purposes Committee, consisting of Messrs. Boyd, Evans, Downes, Grindley, Hodgson, Professor Tichborne, and Wells, were re-elected.

The School Committee, consisting of Messrs. Boyd, Dr. Burnes, Downes, Grindley, Hodgson, Tichborne, and Wells, were also re-elected; as were the Declarations Committee,



consisting of Messrs. Boyd, Gibson, Grindley, Montgomery, and Wells.

#### EXAMINER OF ASSISTANTS.

A letter was received from Mr. J. I. Bernard resigning his position of examiner for the qualification of assistants of pharmaceutical chemists, and thanking the Council for the confidence they had placed in him.

The PRESIDENT said he had requested Dr. John Evans to act as examiner, and the Privy Council sanctioned that temporary appointment; but there were no candidates for the last examination.

#### THE CURRICULUM.

A letter was read from Mr. W. J. Savage, of Newry, stating that he desired to present himself at the April examination, 1894, and asking the Council to accept from him a three-months' course of chemistry commencing on January 1 in that year, taken out in the Working Men's Institute, Belfast.

The REGISTRAR said two other candidates had made similar requests. He had told Mr. Savage that the regular course takes four months, but that the professors would give extra hours.

Mr. WELLS, referring to a remark about their own school which Mr. Grindley had made, said it should not be a hundred-hours' business, but a course of practical chemistry, in which the students would have to learn their chemistry. There seemed to be an opinion that the whole thing was to get a certain amount of chemistry into a certain amount of hours; there did not appear to be the idea that they were to learn chemistry. Many members of the Council wished their school to be like the English school, which was a thoroughly teaching school. The students learned systematically in it, and came out thoroughly practical chemists. It would be hard on the professors to ask them to give extra hours to one or two men.

Mr. Savage's request was referred to the Law Committee, who have power to grant extra hours.

An application from Mr. R. G. Rogers, of Mullingar, for leave to present himself for examination under section 7 of the Pharmacy (Amendment) Act, 1890, as a chemist and druggist who had been in business as such before the passing of that Act, then came on for discussion.

The PRESIDENT stated Mr. Rogers's case, but

Mr. WELLS said this case had been before that committee on several occasions, and had been thoroughly threshed out. The conclusion to which the Declarations Committee came was adverse to the applicant. Mr. Wells stated the evidence which came before the committee, and ultimately the application was rejected.

#### MEMBERS AND ASSOCIATES.

On the motion of Mr. BOYD, seconded by Dr. BURNES, Mr. Henry Arthur Swayne, of Gloucester Street, Warwick Square, London, and Mr. Patrick Coghlan, of the Seymour Medical Hall, Ennis, were admitted members.

On the motion of Mr. HODGSON, seconded by the PRESIDENT, Mr. John Harty, of Nenagh, was nominated as an associate druggist.

Some other business having been disposed of, the Council adjourned.

MILK, when saturated with carbonic acid under pressure will undergo no change within a week, according to C. Nourry and C. Michel.

**AUSTRALITE: A NEW EXPLOSIVE.**—Recently, states the *Australian Mining Standard*, a number of persons met in one of the Proprietary open-cut workings at Broken Hill to witness trials of "Australite," a new explosive locally made, and for which special properties are claimed. The trials were made in the presence of experts, in  $4\frac{1}{2}$ -foot drill-holes, and up to 12-foot holes, and with from  $1\frac{1}{2}$  lb to 10 lbs. weight of the explosive, the rock-displacement being from 30 to 125 tons. In every respect the test was considered satisfactory, for not more than one-fifth of the weight of powder required was used, and, in addition, the new compound is cheaper than powder. A company—the "Australite" Explosive Company—has been formed to work the new substance, and steps are being taken to secure the patent rights in foreign countries.

#### CHEMISTS' ASSISTANTS' ASSOCIATION.

THE first meeting of the seventeenth session of the Chemists'

Assistants' Association was held at 103 Great Russell Street on October 5, when, after the usual preliminary business and the nomination of fresh members, the PRESIDENT (Mr. E. F. Harrison) read his inaugural address. Mr. Harrison's address was an urgent appeal to the members of the Association to bring into membership other chemists' assistants, and to those outside to join. After briefly sketching the origin of the Association, he said on the whole it had succeeded fairly well in accomplishing the objects aimed at by its founders. Many assistants had spent pleasant evenings there, had made friendships that had been deep and lasting, besides many pleasant acquaintances that had been passing; had learnt to view others engaged in the same work as themselves as colleagues, and had been drawn out of the semi-frozen condition that chemists' assistants get into when they are out of reach of such a society as this. Many, too, had been the papers that had been read and published, and much useful work had first seen the light through this agency. But the Association had not succeeded as some of them would like to see it succeed. With all the hundreds of assistants in London their membership had not risen above 200. Of course, London is big enough for a dozen such associations, and they could hardly expect men from distant parts to come regularly. Still, many think it worth while to belong to the Association even when they are not able to come often, and they might legitimately expect a much larger membership than they had ever had.

It is felt and admitted on all hands, he said, by both proprietors and assistants, that somehow the business of pharmacy is in a bad way; the old easy-going and easy-paying business is no more; the type of druggist who lived by it is dying out, and is being replaced by the scientific and up-to-date pharmacist on the one hand, and by the pushing, cutting, unscientific but business-like store-keeper on the other. Prices are disorganised, there is no uniformity of practice in anything, and members of the trade are constantly crying out for some drastic and impracticable remedy or other, but disagree widely about what that remedy should be. It is outside my present scope, Mr. Harrison said, to exhaustively consider the causes of this unsatisfactory state of things, but it is probably within the experience of all here that many of the ills from which pharmacists suffer arise directly from mean and petty trade-jealousy and rivalry. One man complains loudly of the long hours he has to slave in his shop, and will not close any earlier because his rival round the corner won't. Another grumbles at the bad prices he gets, and sells patents at a halfpenny less than the man over the way. Yet another protests against doctors dispensing and, perhaps, using inferior galenicals, but supplies the nearest open surgery with "tinct. rhei sine croce," because if he didn't someone else would. These difficulties could surely be met better if pharmacists would take counsel together.

You will feel tempted to remind me that I am addressing an assistants' association, and not a gathering of proprietors, but the hope of pharmacy is in the rising generation. The assistants of to-day are the masters of to-morrow, and if they have been on terms of good friendship as assistants, and have learnt to regard each other as comrades, there is good reason to hope that the habits of association and of acting in union which they have so acquired will not leave them as soon as they pass out of assistantship.

The President also referred at some length to the educational influence of the Association exercised by the papers on scientific and trade subjects read at their meetings. The Association, he added, was under the wing of no person nor of any other society, and they would always welcome an expression of views, so long as they are rational, from anyone on a trade-matter. There was a democratic institution, worked by a majority vote; if anyone does not like what is done, let him persuade the majority that better can be done. The President concluded by drawing attention to the excellent programme arranged for the meetings up to Christmas.

Mr. INCE moved, and Mr. FRANK A. ROGERS seconded, a vote of thanks to Mr. Harrison for his address.



## PHOTOGRAPHIC EXHIBITIONS.

THE Thirty-eighth Annual Exhibition of the Photographic Society of Great Britain is now open at 5A Pall Mall East. There are 395 exhibits, made up of 334 frames of pictures, 18 exhibits of lantern-slides, &c., and 43 of apparatus. This shows a great falling-off as compared with last year, although we believe that the number submitted exceeded that of last year. The wceding-out, therefore, accounts for the comparative smallness of the exhibition. It is rumoured that over 500 exhibits were refused.

The judges, who were Mr. P. H. Emerson, Col. J. Gale, Messrs. F. Hollyer, F. M. Sutcliffe, and J. B. B. Wellington, with whom were Messrs. Chapman Jones and Andrew Pringle, have awarded 9 medals for the following:—

## PICTURES

3 and 72. A series of 35 views, entitled "Mongst Mines and Miners," by Mr. J. C. Burrow, taken with a combination of magnesium and limelight. The lighting and detail in these photographs is excellent, and considering that some of these pictures were taken 2,000 feet below the surface, the results are simply wonderful, and the medal is certainly well-deserved. The prints are on P. O. P.

18. "Study of a Child," by W. A. Cadby. A rather flat bromide enlargement of a child in slight drapery.

30. "Un Harem en Déplacement," by Emile Frechon. This is one of a number of splendid collotype prints on rough paper, very soft, and beautifully printed, showing a caravan in progress across the desert.

40. "Omegua, Lake Oita," by J. A. Sinclair. A most artistic enlargement on rough paper, 10 by 8, sepia tone.

55. "After Sundown," by Charles Moss. A small study on Mezzotype paper, giving a charming twilight effect.

103. "The Proud Turk," by J. S. Berghheim. This is a study of a Turk's head. It seems to be printed on a yellow kind of canvas, which gives it rather an unpleasant effect.

241. "Figure Study," by Count von Gloeden. One of a number of figure studies from the nude. The posing of the figures is most graceful, and much time and trouble have evidently been spent by the artist to obtain such charming effects.

248. "The twice-unwelcome calm, which bodes a storm and clips our wings when most we need their aid," by John Howson. This is a fine sea-picture, enlarged from a small negative, and printed on Alpha paper, sepia tint. The atmospheric effect is splendid, and the schooner in the foreground stands out well.

254. "Waiting and Watching," by Miss Emma J. Fitz. Possibly a study of a French peasant-girl sitting in the twilight or strong sunlight, supposed to be watching for somebody, but a good deal is left to the imagination. The print is very flat, and looks as if it had gone wrong in the toning.

Amongst the unmedalled pictures are many others worthy of mention. Colonel Gale shows four splendid pictures—Nos. 6 to 9—but these are not in competition. A splendid enlargement of clouds coming down the Zermatt Valley, by Mr. W. England, and a moonlight view of Mont Blanc, taken by Captain Abney at 10 P.M. on January 7, enlarged on bromide-paper; this shows what effects can be obtained by moonlight, and should encourage amateurs to give moonlight snow-scenes a trial. Dr. Emerson has two carbon enlargements, done by the Autotype Company—"Beckenham Ferry" and "The Wherry"—both in the naturalistic style, giving fine atmospheric effects. An instantaneous football picture, by Mr. H. K. Stephens, is worth notice. It represents a match between Blackheath and Kensington, in which Mr. Stoddart is caught in the act of kicking a goal.

Mr. Henry Stephens shows some fine studies of flowers, and a picture of a boy looking unmistakably miserable because "Daddy wouldn't buy him a Bow-wow." Mr. J. A. Sinclair contributes a good number of hand-camera shots, which are very fine. Mr. W. M. Warneke shows a fine picture, "Sands of Iona—Twilight," taken with a large camera, 24 inches by 14 inches, and printed in warm platinum. The two fisher-girls standing with bare feet in the water considerably add to the making of the picture.

Mr. A. R. Dresser's "Barge in the Thames," a bromide enlargement, is splendid, and also Mr. H. Sandlands' "Studies from the Zoo," enlargements by the carbon process. Altogether the work in the exhibition are of a very high standard.

## APPARATUS.

The exhibits of apparatus are very few this year as compared with last year. This is accounted for by the fact that all exhibits in this class must have some claim to novelty. Among these may be mentioned the Allendale lantern, very small and light, which can be affixed to an ordinary camera-stand. Dissolving and changing the slide are effected by one movement.

Mr. Samuels shows a rather good form of changing back. The plates are in sheaths, and raised in pairs by a lifting frame, something after the manner of the changing arrangement in a Talmer hand-camera.

C. S. Scott's lantern-slide printing-frames for  $\frac{1}{4}$  and  $\frac{1}{2}$  plates are unique. Any portion of the negative may be brought into position for making a lantern-slide, and the  $\frac{1}{2}$ -plate frame is fitted with an adapter to take  $\frac{1}{4}$  plates.

J. Barnard & Son show two very complete boxes of paints for lantern-slide colouring, one varnish and the other water colours.

J. Swift & Son exhibit a fine case of their lenses specially constructed for optical projection.

R. & J. Beck show a new Frena  $\frac{1}{4}$ -plate hand-camera, which will be on the market in about a month. The changing arrangement is an improvement on the old Frena. The lens is a  $5\frac{1}{2}$ -inch R.R., with stops from F/11 to F/64. The method of focussing with this hand-camera is far in advance of anything yet produced. The  $5\frac{1}{2}$ -inch lens is set to focus at 20 feet and over, but by using a supplementary lens in front of the ordinary lens the focus is shortened. Four of these extra lenses are made, and by their use all objects up to 3 feet will be in focus.

Taylor, Taylor & Hobson exhibit some of their splendid caskets of lenses fitted with their new standard screw threads.

G. Houghton & Son show a walking-stick stand with collapsible head and sliding legs for extension, a telephoto lens by Clement & Gilmer, with samples of work done by it, also their "Holborn" printing-frames with hinged springs and print-indicator.

J. R. Gotz shows a light and portable camera, the "Poycho," with long extension, so constructed that it may be used for stereoscopic work.

R. Field & Co. show the "Watkins' Exposure Metre," with improvement of blue glass for judging the tint, and also the "Watkins' Junior." The same firm also have on view Anderton's stereoscopic bi-unial lantern, which will be used on Monday, Wednesday, and Saturday evenings during the Exhibition at 8.30 P.M.

Fuerst Brothers show samples of their popular developers, "Metol Hauff," "Glycin Hauff," and "Metol Cartridges"; and also four portraits developed with "Glycin," which received 2, 4, 12, and 24 seconds' exposure respectively. It is almost impossible to tell the difference in the prints. This is an excellent test of the latitude in exposure which may be given when using this developer.

W. Watson & Sons show a 15 by 12 studio camera, with interchangeable repeating back, on an improved "Premier" stand. The improvement consists in the method of raising and tilting the stand, and the arrangement of the repeating back. The same firm exhibit a 10 by 8 "Acme" camera with aluminium mountings, a  $\frac{1}{4}$ -plate "Alpha" hand-camera, and a "Vanneck" with extra finder for vertical pictures.

Adams & Co. have exhibits of their "Ideal No. 2," with pneumatic shutter, speed  $\frac{1}{100}$  second to one second; "Twin-lens Ideal," with full-size view-finder for horizontal and vertical pictures; an "1894 Adams," with rising and cross fronts, swing-back shutter, and changing-box; also the "Adams" changing-box, taking twelve plates, or twenty-four films; aluminium pinhole lens, with various apertures; aluminium view metre, adjustable to all lenses; aluminium focussing glass; adjustable shutter with brake, for time and instantaneous exposures; a lantern-slide camera, and also their pantoscope, with chromoscope attachment for tinting lantern-slides.

Holmes & Watson show a huge camera for photo-mechanical work, to take plates up to 30 by 36. It has every



possible movement that can be wished for; the bellows can be extended to 20 feet, if required, by inserting different lengths in centre. The back has carriers in the American style to take any size of plate.

Archer & Sons, Liverpool, have one of their Uni-lux Bi-unial lanterns on show.

E. M. Richford shows his "Nameit," for printing titles on negatives.

#### A PHOTOGRAPHIC SALON

has been opened at the Dudley Gallery, Piccadilly. It contains nearly three hundred specimens of artistic work, comprising specimens by most of the recognised masters of the black art. The pictures sent by Ralph W. Robinson are, as a whole, worthy of first place. Some of these are wonderfully perfect in light and finish. For these photographs a novel style of frame has been adopted. It is made of roughly-painted unplanned wood, which, though coarse-looking, is effective. H. P. Robinson, Colonel Gale, T. C. Hepworth, H. Van der Weyde, Charles Treble, Frederick Hollier, and J. S. Berghem send excellent pictures in various styles, all manifesting great judgment. The portraits are not notably good, with the exception of "A Study," by Mrs. Francis Clarke, which is one of the gems of the exhibition. The Salon will remain open until November 11.

#### TRADE-MARKS APPLIED FOR.

ANY person who has good grounds of objection to the registration of any of the following marks should at once communicate with Sir Reader Lack, Comptroller-General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

(From the "Trade Marks Journal," September 27, 1893.)

"ELIIGWEEDUM"; for a remedy for indigestion. By Eliz. Vaisey, Thames Villa, Shillingford, Berks. 173,710.

"VERMIN-DESTROYING HAIR-OIL," and device of comb, and wording on label; for a medicated hair-oil for destroying vermin. By J. Walker, 21 Dockhead Street, Saltcoats. The essential particular is the device of small-tooth comb. 174,112.

"KELLETT'S ELECTRIC SALVE COMPANY," as signature; for salves and embrocations. By Kellett's Electric Salve Company, 76 Victoria Road, Seacombe. 174,114.

ELENIKON"; for a compound to be used as an inhalant. By J. G. Richards, 58A High Street, Hastings. 174,357.

"TRINICA," signature, and device of two crossed sweeping-brooms; for a preparation for the hair. By C. W. Smartt, 54 Parade, Leamington Spa. The essential particulars are the signature, device, and the word "Trinica." 174,266.

(From the "Trade Marks Journal," October 4, 1893.)

"ZONICO"; for sheep-washes, disinfectants, vermin-destroyers, &c. By P. Molyneux, 30 Bruce Road, Bow. 174,130.

"HORNINHAND," and device of a hand holding cow's horn; for a veterinary chemical compound. By E. Earnshaw, 2 Long Clough, Littleborough. 174,941.

"OSTROGO"; for a speciality for consumption and diseases of bones and joints. By W. Baillie, 146 High Street, Portobello, Edinburgh. 174,131.

"BREVA"; for lozenges, a cure for headache. By J. Fraenkel, 22 Trent Road, Brixton Hill, S.W. The essential particular is the word "Breva." 174,294.

Black and triangular devices on label, with monogram and signature; for aerated waters of all kinds, and for quinine tonic-water. By Jewsbury & Brown, 113 Market Street, Manchester. The essential particulars are the combination of devices and the signature. 174,630, 174,639.

Device of weather-vane in shape of brewer's dray with horses and carman; for mineral and aerated waters. By Chester's Brewery Company (Limited), Ardwick Brewery, Princess Street, Manchester. The essential particular is the device. 174,760.

## New Companies.

**JOHN FORSTER & Co. (LIMITED).**—Capital 5,000*l.* in 17 shares. Objects: To carry on the business of mechanical engineers, colliery-owners, shipbuilders, metallurgists, and manufacturing chemists. The first subscribers (who take one share each) are:—J. Forster, Cowley Hill Lane, St. Helens, engineer; S. Forster, Denton's Green Lane, St. Helens, clerk; T. Gerrard, 16 Cropper's Hill, St. Helens, boiler-maker; J. Green, 16 Cropper's Hill, draper; Elizabeth A. Gerrard, Esther Forster, Mary Forster, Denton's Green Lane. The first directors are J. Forster, S. Forster, and T. Gerrard. Qualification, 50*l.* Registered office, Atlas Street, St. Helens.

**CAMPBELL CASH CHEMIST (LIMITED).**—With a capital of 5,000*l.* in 1*l.* shares. Object: To carry on at Norwich and elsewhere the business of wholesale, retail, and manufacturing chemists and dispensing chemists and druggists. The first subscribers (who take one share each) are:—J. Campbell, London Street, Norwich, chemist's assistant; Mary Wills, London Street, spinster; J. H. Hartley, 179 Dereham Road, Norwich, chemist; A. Lewin, Oxtou, Birkenhead, bookkeeper; C. Stephan, 42 Sidney Street, Arbroath, N.B., pharmaceutical chemist; J. Forbes, The Village, Tarland, N.B., chemist's assistant; J. Park, 51 Hall Lane, Liverpool, printer. The business of the company is to be carried on by the managing director, who is not named in the articles of association.

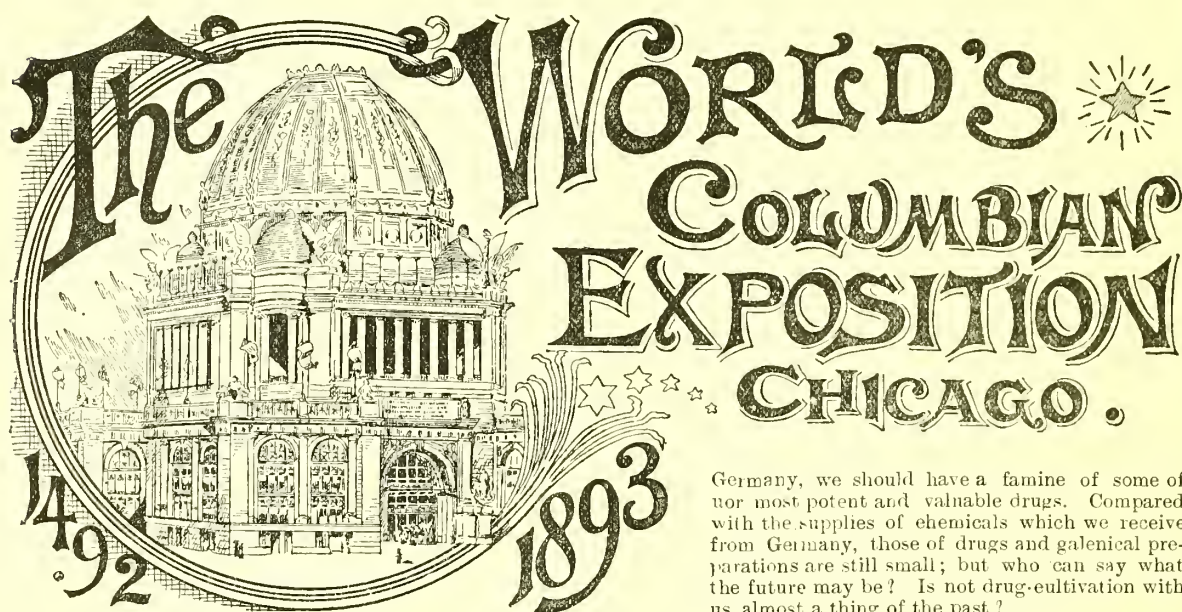
**MOLINEUX (LIMITED).**—Capital 1,000*l.* in 1*l.* shares. Object: To acquire as a going concern the business of a grocer, chemist and druggist, corn and oil merchant, hitherto carried on at St. George's, Salop, and to carry on and extend the same. The first subscribers (who take one share each, with one exception) are:—Thomas Molineux, St. George's, Salop, butcher; Miriam Molineux, wife of the above; J. A. Molineux, St. George's, butcher; F. A. Molineux, St. George's, butcher; William Molineux, St. George's, farmer; Eleanor Molineux, wife of William Molyneux; Thomas Molyneux, junr., Stafford Place, St. George's, grocer. Thos. Molineux, jun., is the managing director. Registered office, Stafford Place, St. George's, Wellington, Salop.

**THE LOMBARD MANUFACTURING COMPANY (LIMITED).**—With a capital of 3,000*l.* in 1*l.* shares. Objects: To carry on the business of chemists, druggists, manufacturers of chemical and medicinal articles, and as grocers and wine-merchants. The first subscribers (who take one share each) are:—J. W. Smart, 7 Nelldale Road, E., printer; E. Evans, 1 Sutherland Road, Bow, stationer; M. Smith, 13 Devonshire Street, London, printer; E. H. Gower, 17 Philpot Lane, E.C., engineer; W. J. Gray, 32 Old Jewry, E.C., solicitor; J. H. Farmer, 32 Old Jewry, E.C., solicitor; R. S. Wright, 16 Old Jewry Chambers, E.C., accountant. The first directors are to be appointed by the above-named subscribers; qualification 10*l.*; remuneration to be determined by resolution of the directors.

**D. MUNRO, SONS & Co. (LIMITED).**—Capital 1,000*l.* in 5*l.* shares. Objects: To take over and carry on the several businesses of Messrs. D. Munro, Sons & Co., export and manufacturers' agents, merchants, and manufacturers; Messrs. Campbell, Gordon & Co., bouillonnaire and extract manufacturers; Messrs. Palmer & Co., manufacturers of soups, sauces, and potted meats; and the Tinworkers' County Council Disinfectant Company; and to carry on the business of export and import agents, merchants, and manufacturers. The first subscribers (who take one share each) are:—D. Munro, 72 Mark Lane, E.C., commission merchant; Rosetta Munro, 11 Nelson Street, E.; W. E. Brent, 17 Eric Street, Burdett Road, E., carman; A. Adams, 22 Rutland Street, Stepney, E., tinsmith; A. Munro, 34 Mile End Road, E., sauce-manufacturer; A. Macpherson, 70 Mark Lane, E.C., tea-dealer; B. J. Hawkins, George Yard, E., traveller. Registered without articles of association. Office, 42 Ocean Street, Stepney, E.

**BOMBAY** is to have a veterinary school. It is in course of erection, and is to cost 75,000 rupees.





#### GERMAN PHARMACEUTICAL CHEMISTRY.

THE next group of exhibits which we have to deal with in the German Chemical Court is the largest of the whole, and is that officially described as "manufacture of chemical preparations of every description." Strictly speaking, it deals with medicinal and technical chemicals and pharmaceutical preparations generally. It is a most important branch of German chemical industry, and is one which, more than any other, is clearly traceable in its origin to the aspirations and energies of pharmacists in days gone by, and it is still closely linked with pharmacy. In its beginnings the fine-chemicals trade sought only to satisfy local consumptive demand. The *apotheker* merely desired to assure himself of the purity of the medicines which he dispensed. Reputations grew there as they have done elsewhere, and with them back-shops have grown into large factories, until now there are—or were in 1891—521 factories engaged in the manufacture of pharmaceutical and photographic preparations, and they employ nearly 15,000 workpeople. Only 30 of these factories are represented at the World's Fair, but they are sufficiently typical to enable us to judge of the branches cultivated, and some of the best-known houses are included. It is estimated that the total annual value of the products of these factories amounts to over 2½ millions sterling, and about one-half of that represents exports. Comparatively few of the exports are named in the official returns, but amongst those which are the three chief in value are aluminium preparations, 13,509 tons; salicylic acid, 243 tons, and tartaric acid, 1,003 tons—exported in 1890. In the same year 41 tons of benzoic acid, 32 tons of chloral hydrate, and 859 tons of oxalic acid were exported. We cannot attempt to compare the produce of the United Kingdom, or of any other country, with these figures. Germany's premier position in respect to some—chloral hydrate, for example—is entirely due to initial discovery and cheap alcohol, while in respect to others high culture on the part of her chemists and persistent research have been the chief factors in pushing certain products to the front.

It is generally supposed that British pharmacy takes little from Germany except chemicals. This is quite a mistake. Until recent years scarcely an ounce of the tinctures which are exported to our colonial and Indian customers was made in this country. Excise regulations compelled our exporters to buy in Hamburg, and we might still have been buying largely there had the agitation which commenced in this journal not resulted in a wise alteration of the regulations. But we still import considerable quantities of galenic preparations—amongst them extracts—and if it were not for

Germany, we should have a famine of some of our most potent and valuable drugs. Compared with the supplies of chemicals which we receive from Germany, those of drugs and galenic preparations are still small; but who can say what the future may be? Is not drug-cultivation with us almost a thing of the past?

Turning now to the exhibitors in the group, we observe that

#### THE ONLY EXHIBIT OF VEGETABLE DRUGS

is made by J. Bernardi, of Leipzig. This is an exhibit about which some American pharmacists have become almost crazy, perhaps because there is not the same opportunity in the United States for seeing materia-medica collections which there is on this side. In small space Mr. Bernardi has placed about 400 specimens of European drugs, and of the packages and bales in which they are prepared for the market. The exhibit is, in a sense, a small museum, and many of the specimens are exceptionally fine. They are arranged in sections, one being of toxic drugs, another medicinal flowers, a third herbs, a fourth aromatic herbs, leaves, &c., and the fifth of drugs which cannot fall into these classes. Specimens of galenic preparations, especially extracts, are also shown, as well as powdered drugs and certain natural colouring-matters, such as chlorophyll and bixine.

Of the exhibits of fine chemicals the largest and first in catalogue order is

#### SCHERING'S.

The *Chemische Fabrik auf Actien, vormals E. Schering*, to give the company its full title, occupies one of the individual cases in the court (alongside the pavilion, page 505), and therein are exhibited some of the most beautiful specimens of medicinal chemicals which it has been our good fortune to examine. They are displayed handsomely, too, for although most of the specimens are very fine in appearance, and many of them of high intrinsic value, they are shown in large quantities under glass shades varying from 12 inches to 22 inches in diameter. The case itself is lined with purple velvet, and the edges of the tiered shelves are filled in with gold letters, which tell graphically the history of the company and the present productive capacity of its factories. We need only mention that the active heads of the concern are Drs. J. F. Holtz and H. Finzelberg, and that they have under them a staff of over 500 men, including 14 trained chemists. An account of the factories will be found in *THE CHEMIST AND DRUGGIST*, vol. xxxix., page 111. Prominent at each corner of the showcase is a large jar, of about 12 gallons capacity, these being devoted to glycerine, kresin, carbolic acid, and magnesium powder. These have a fine effect, but that might be said of other samples. For instance, at one end of the case is a very large shade containing raw and resublimed iodine, and at the other end is a similar shade containing the largest and finest crystalline mass of metallic bismuth which we have ever seen. At the Paris Exhibition



there was a specimen of bismuth which was universally admired for its beauty, but Schering's one surpasses it—cubical branches springing out from the central mass in a tree-like manner, thus displaying the natural iridescence with lovely effect. Two other specimens are curious as presenting the aspect of a ruined city, with walls, towers, and hollow gables standing out in strange resemblance to some pictures we see of ancient Grecian cities. These are popular specimens, but they are by no means the highest in commercial interest, for about fifty substances altogether are represented, including the synthetic products which the company has discovered and introduced to therapeutics. Liebreich's chloral, chloralamid, piperazine, and a new compound of it (the salicylate) are shown in typical specimens, and a fine series of metallic salts. Thus at the summit of the case are huge crystallisations of tartar emetic, copper sulphate, and barium nitrate. We noted also potassium bromide and iodide in crystals weighing 1 oz. each; some potassium permanganate in crystals 1 inch long and  $\frac{1}{2}$  inch at the sides. Various salicylates are shown, and all the products from galls, including two kinds of tannic acid—one granulated and brown for technical purposes, and the other in silky amber needles for medicinal use. The company has not attempted to show all its manufactures, but the collection suffices to illustrate the kinds and quality of the chemicals produced, and it stands out clearly as one of the most notable in the whole Exposition.

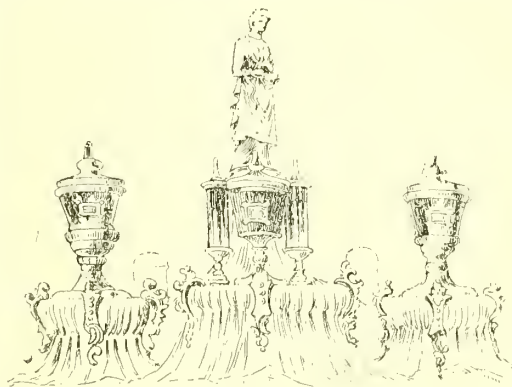
#### THE BRUNSWICK QUININE-FACTORY

has, for all the space occupied, the least imposing exhibit in the whole court, but it is decidedly interesting; for, apart from good specimens of commercial cinchona-alkaloidal salts, there is a series of twelve specimens of coca-leaf products illustrating the researches of Professor Liebermann and Dr. F. Giesel. We cannot do better than name these. They are:—Two specimens of *cocaine hydrochlorate*, one in small crystals, the other in clear crystalline plates measuring  $\frac{1}{2}$  inch each way; *ecgonine*, obtained from the amorphous bases, is in similar-shaped white crystals, but half the size; *benzoyl ecgonine*, on the other hand, more resembles Epsom-salts crystals; *isococaine hydrochlorate* occurs in white crystals; *cinnamyl ecgonine* is much larger and yellow; *anhydroecgonine hydrochlorate* is crystalline, but efflorescent; *tropacocaine hydrochlorate* is translucent, and in beautiful crystals; *hygrine hydrobromate* is a granular white powder, apparently non-crystalline, but beside it is a magnificent specimen of *cocaine* (the pure alkaloid), in crystals the size and shape of the annexed figure. The next specimen is *pseudotropine*, from tropacocaine, in small needle-shaped crystals; and the last *truxiline*, which is in pale-brown granular crystals. The collection is of purely scientific interest, and as such it is apt to be passed over by the visitor; indeed, it is astonishing how many pharmacists have walked through the Exhibition and have missed this and similar exhibits modestly displayed.

#### FARBENFABRIKEN, VORMALS FRIEDR. BAYER & Co.

The company which we have now to deal with occupies the enviable distinction of being considered the sovereign example of the highest scientific aspirations commercially crystallised. A few months ago that platonic exponent of science, *Nature*, admitted into its columns a lengthy and illustrated article by Professor Armstrong, President of the Chemical Society, in which the laboratories of the company at Elberfeld were described, and the writer seemed to envy the possibilities in research which had been created for strictly commercial purposes. Advertisement was not in Professor Armstrong's mind, we should think, but he took the Farbenfabriken as an example of what can be done in chemical research when we associate business with it. The Farbenfabriken was worthy of the article. It has a capital of 12,000,000 marks, and gives employment to about 2,000 people, amongst them seventy trained chemists. The greater number of their chemists are engaged in the research-laboratories in synthetical work, and they might as well be engaged in some university so far as the immediate objects of their researches are concerned. They are amongst the foremost chemists in Germany, learned in organic synthesis

and so forth. The discovery of azo and alizarine dyes is the purpose of their lives, and the manufacture of these the business of the company. It was amidst these scenes that certain well-known pharmaceutical products were discovered, and it is the exhibit of these at the World's Fair that concerns us at present. On reference to the plan it will be seen that the company has a large space in the German Court, and it is one of the best, for one side of it faces the Columbian Avenue, where it is seen and admired by the strolling millions. Messrs. W. H. Schieffelin & Co., of New York, the company's U.S. agents, have charge of the exhibit, and they have made it an attractive one. The whole of the base of the



case is lined with rich lavender-coloured velvet, draped, in the case of the stands, in a graceful way, and upon these stands are placed large cut-glass vases of the company's pharmaceutical products—phenacetin, sulphonal, trional, tetralol, aristol, euprophen, salicylic acid, salol, chlorethyl, &c. We give a sketch of the phenacetin group, which shows the way in which the goods are arranged, and may say that the largest vases hold about 20 lbs. of phenacetin. The whole of the substances are displayed in this rich manner, and the styles in which the goods are packed commercially are also exhibited. The case-frontage in the interior of the court is devoted to the dye-products. The statue which surmounts the pyramid is a golden one of Hygieia. The ornaments at the edges of the stands are also gilt. Three hundred yards of velvet have been used in decorating the interior.

#### DR. F. VON HEYDEN NACHFOLGER.

We are not surprised to find that Dr. Carl Kolbe, the proprietor of this business, has made a strong feature of salicylic acid in his exhibit, for the factory was founded at Radebeul, near Dresden, about twenty years ago to make salicylic acid by Professor Kolbe's process, and it has been gradually developed until many other manufactures have been added, all being, however, related to the aromatic hydrocarbons. The salicylic acid as shown in the Exposition is in three forms—powder, small crystals, and large crystals—each having a melting-point of  $157^{\circ}$  C., which indicates that it is absolute (physiologically pure) salicylic acid. Large jars of these occupy the centre of the case, and they are surrounded by a series of alkaline and metallic salicylates, including a white bismuth salicylate containing 64.2 per cent. of  $\text{Bi}_2\text{O}_3$ , and a grey one with 40 per cent. of the oxide. The exhibit is particularly rich in groups of cresols, phenols, and salols, with their compounds; most of them being in actual use as medicines, but the whole being of educational value, since they show those who have not every day the opportunity of seeing the latest things in materia medica the characteristics of rare medicines and the contrast in appearance of nearly-related bodies. To take, for example, a group which was mentioned recently, the cresol "carbonates." These are placed together—creasote carbonate, a jelly-like substance; guaiacol carbonate, a white powder; and eugenol carbonate, a grey powder—the complexity of the basic side of the compounds thus determining the form. These remedies were discovered in the Von Heyden factory by Dr. R. Seibert, and are used as internal antiseptics. To the same class belong "Solutol," a cheap disinfectant, and "Solveol," a non-poisonous substitute for carbolic acid for use in surgery. There is also a fine group of salols, some of them



rare, and a particularly fine specimen of salol (phenol salicylate) in clear crystals several inches in length, and about  $\frac{1}{2}$  inch thick. Rochelle-salt crystals are not unlike them. The bismuth compounds which have been used in the treatment of intestinal affections, such as naphthol bismuth and tribromphenol bismuth, are well represented. We also noticed the series of cresatols and cresotinic acids, which have of recent years attracted attention owing to their close relationship with salicylic acid, but the whole of the exhibit is a striking proof of the richness of coal-distillates in bodies for the cure of disease. With few exceptions, phenol is the starting-point in the production of the specimens, and by skilfully-devised synthesis bodies have been built up which, without undergoing any marked change in general grouping, have each a specific physiological action or economic value.

#### KNOLL & Co., OF LUDWIGSHAFEN.

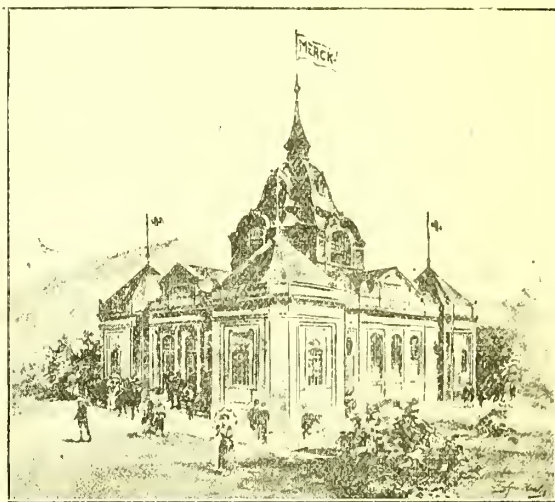
It is a somewhat remarkable circumstance that, although morphine was discovered in Germany, it has only been within recent years that the alkaloid has been manufactured there extensively. The Scotch makers have always done good business there, the salts specially favoured by German physicians being made and exported in quantities which are a fair set-off to the large imports of some alkaloids that we receive from Germany. But it can no longer be said that the latter country depends exclusively upon us for opium alkaloids. Several firms make them, and there is at least one exhibit in the German Court which may be regarded as the outcome of an attempt to tackle the morphine-industry seriously. This is made by Knoll & Co., who started their factory at Ludwigshafen in 1836 for the production of active principles generally, especially the alkaloids of opium. Of these, nice specimens are shown in their exhibit, the base of the case containing a full series of morphine and codeine salts, with the pure alkaloids in exceptionally fine crystals. The only other natural alkaloids shown are caffeine and theobromine, the salts of the former being especially notable. In the same group we may include "diuretin," the theobromine compound discovered by Professor von Schroeder. This is made the *pièce de résistance*; a whole section of the case is devoted to it, and portraits are shown of Von Schroeder and Gram, who established its reputation chemically and physiologically, while the fact is made prominent in the case that McKesson & Robbins are the firm's agents in U.S.A., and Burroughs, Wellcome & Co. in the United Kingdom. Various synthetic products are also exhibited, such as antifebrin, phenacetin, styracal (cinnamylate of guaicol), and salicylic acid (m.p.  $156.8^{\circ}$  C.) with its salts. We further observed that the firm manufacture lithium salts, benzoates, bromoform, carbolic acid, and other medicinal chemicals of a refined nature.

The spirit of organisation, which is one of the characteristic features of the American race, and is particularly noticeable in all that the Colombian Exposition promoters have done, has caught one of the German firms who are represented in the Chemical Court—viz.,

#### E. MERCK, OF DARMSTADT,

and they have outstripped all their compatriots in the representation of their manufactures. In addition to the collective exhibit which they make in the court the firm have erected a large pavilion in the grounds, which is known as Merck's Building, intended primarily for the exhibition of their manufactures, but constituting an admirable meeting-place for pharmacists. The reason for this enterprising display is not far to seek, for of all the foreign houses which have established branches in the States there is none which rival in popularity the house of Merck. It was in part a recognition of this favour that influenced the firm to erect the Merck Building, and from frequent visits which our representative made to it we are able to speak of the comfort and convenience which it presents to the wearied sight-seer. One of the retiring-rooms is furnished as a library and reading-room. We are more concerned at present, however, with the wonderful chemical exhibit in this building. The illustration which we give of the exterior sufficiently shows the style of architecture. The corners in the interior are occupied by offices and retiring-rooms, and the central portion is devoted to the upright showcases in which the specimens are displayed, while the bays contain additional

showcases. This furniture is extremely elegant, and is executed in old and pale mahogany, elaborately carved. It was designed and executed by Mr. Bangs, of Boston, a gentleman who not many years ago was behind a drug-counter, but whose taste in cabinet-work and fresh ideas as



to the fitting of pharmacies compelled him to give up pestle and mortar for rule and compasses. He has made a nice interior of the Merck Building, the design being emblematic of the progress of pharmacy, and including a number of statuettes (Esculapius, &c.) executed by a Boston artist.

Of the exhibits in the building it is exceedingly difficult to speak, because they are so numerous. There are more than 1,200 things, and in the German Collection Exhibit, where the number is exactly 400, and the enumeration of the whole, with brief descriptive notes, fills a catalogue of 64 pages. Exclusive of medicinal chemicals, which are shown in the cases in the centre of the building along with 2,000 packages representing the styles of packing, there are a number of special collections. We particularly admired a case devoted to opium, in which the instruments used for collecting the drug are shown, and all the marketable varieties of opium. One of these is a sample of Constantinople opium containing 16 per cent. of morphine. There are complete series of Merck's guaranteed reagents, minerals, active principles (100 for educational purposes), and artificial plants. There is material for many days' study in the Building Exhibit, and the same may equally be said of the careful in the Collective Exhibit. The 400 specimens in the latter are the staples of pharmaceutical chemistry, and what particularly strikes the visitor is the prodigious quantities in which rare or expensive products are shown. Take aconitine, for example. It is shown in pound bottlefuls—the pure alkaloid in magnificent crystals with five of its salts, and japaconite and pseudo-aconitine. We reckoned up about 7 lbs. of beautiful physostigmine and its salts (borate, hydrobromate, hydrochlorate, salicylate, and sulphate), all crystalline, all colourless. The mydriatic alkaloids—atropine, hyoscyamine, and hyoscyne—are shown in quantities which make one think that they are as cheap and easily isolated as quinine, but quantity is backed up by skill, for there is an interesting series of the numerous decomposition and secondary products derived from the atropine group, as well as representations of rarer mydriatic alkaloids, such as duboisine. The narcotic group, as represented by common and rare opium alkaloids, caffeine and its congeners, glucosides, vegetable acids, metallic salts, and several synthetic products, are included in the exhibit. Taking it as a whole it is a convincing exposition of the capabilities of the Merck factory at Darmstadt. At the present time the firm is composed by six partners, all Mercks, and descendants from Apotheker Merck, who commenced his pharmaceutical career in 1668. The manufacture of medicinal chemicals on a large scale was commenced in 1817 by H. Emanuel Merck with morphin



and other alkaloids and active principles were added as they were discovered, and so the firm progressed until now they employ 450 workmen, including 28 skilled chemists.

#### A VISITOR'S VIEWS.

We have received from an American pharmacist, who has recently spent several weeks in studying the exhibits in the World's Fair, a lengthy letter, from which we make the following extracts:—

The building devoted to manufactures and liberal arts is perhaps the one that will most interest visitors. Under a majestic roof, substantially constructed, and covering a floor-space of nearly 60 acres, including the galleries, are displayed the contributions of nearly every nation of the globe to those branches of material progress so judiciously named the Liberal Arts.

To one of impartial mind it would be difficult to say to which of those two continental giants, France or Germany, should be accorded the wreath of victory for the respective displays in this building. Teutonia seems to have covered the wider field, but in the artistic excellence of everything she has displayed it hardly seems possible that Gallia can be outstripped.

Great Britain? I have heard it admitted that in this building at least she has not done herself justice. Some of

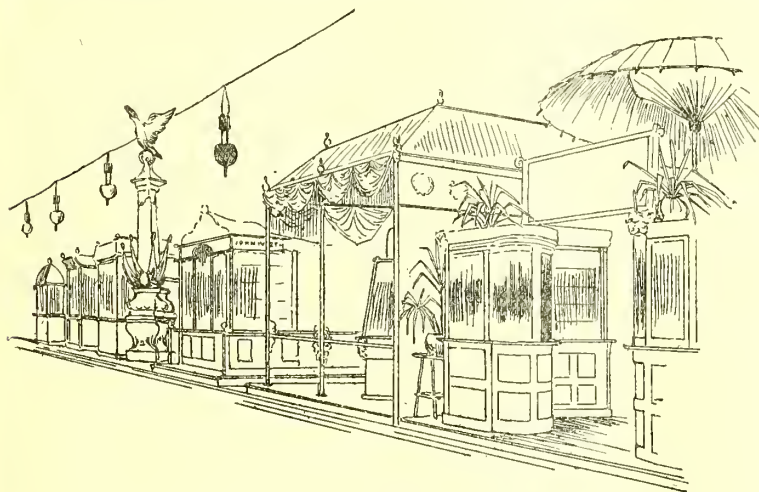
Among exhibitors from foreign countries reason for complaint has recently arisen. Some of the exhibitors have thought that it was hardly right to be deprived of the privilege of selling duplicates of their exhibits, and trouble has occurred owing to some sales having been made of goods that were supposed to have been bonded. This has led to unpleasantnesses that have resulted in the Russian Commissioner closing, in the defence of his countrymen, many of Russia's most interesting exhibits.

As an example of the ease with which such difficulties may arise permit me to cite an instance which came under my observation while passing through the Austrian section of the Mining Building. All the prominent mineral waters of Austria are here displayed. My attention had been attracted by a very beautiful painting of two figures—one depicting a *chic* young woman in the act of drinking her morning dose of "Franz Josef" water; the other, a dark-eyed Tyrolean maiden engaged in labelling bottles of "Levico" water. While I was admiring these the attendant was engaged in taking bottles of the "Levico" water and of the "Franz Josef" water from their respective cases, for display on the shelves under the picture. Suddenly an official made his appearance and demanded why those boxes were being opened, adding something about "duties." The attendant, who was of the gentler sex, and who evidently had nothing in mind but her "duties" to her employer, replied that the cases belonged there, and she was instructed to display the bottles on the shelves. Had the attendant been one of the "lords of creation" a different reply might have led to—well, let me say an international episode.

A matter which has given rise to much unfavourable comment is the manner in which exclusive concessions had been granted. Some of these have especially injured some of the foreign exhibitors, to whom it was all-important that the privilege of giving or selling samples of their goods should be granted, in order that visitors could become familiar with them. The Council of Administration have for some time appreciated these hardships, and have endeavoured to modify or remove them. In some cases the contracts with the concessionaires were such that this could be done, but in many others it was impossible, and much bad feeling has arisen, and will continue until the end of the Fair.

Taken all in all, the extent and variety of the examples of the world's industries which are now to be seen here, the

magnificence of the buildings in which they are displayed, the artistic excellence and beauty of all the surroundings, render it not an extravagance to say that this grand conglomeration makes the White City by the Lake the eighth and perhaps the greatest wonder of the world.



A GLIMPSE IN THE AMERICAN GALLERY.

On the right, under the umbrella, is F. Stearns & Co.'s exhibit, and further on the Wyeths and Sharp & Dohme are placed.

the displays are really very fine, but it can hardly be said that in any single branch does she make the showing that her sons and daughters would have liked to see. If, however, with her own displays those of her colonies be included, the grand total is worthy of the highest praise.

I cannot forbear adding that the displays of the manufactures of the United States compare very favourably with those of any other country. As might be expected, they are in extent and variety much greater than any other. From the view-point of general excellence they would open the eyes of European connoisseurs.

It would not be amiss to add a tribute of praise to the magnanimity shown by the American exhibitors generally towards the exhibitors of other countries. They have been content in very many instances to place their really interesting displays in galleries, in order that the best positions might be reserved for their foreign competitors. In many cases this sacrifice will prove a very serious one, as, owing to the extent and interesting character of everything displayed few visitors care to go out of the main aisles, and those who are in the galleries have, as a rule, found themselves almost isolated. The management could do much to overcome this by providing more elevators and stairways to the galleries; and in justice to the exhibitors, whose expenditures for the booths and displays have aggregated many millions sterling, it is hoped that something to this end will soon be accomplished.

### Next Week.

Meetings, &c., to be held, and business to be transacted thereat. Suitable notices will be inserted in this section if received by the Editor on or before Wednesday.

WEDNESDAY, October 18.—*Western Chemists' Association* (of London), Westbourne Restaurant, 1 Craven Road, Paddington, W. Annual meeting at 8.30 P.M.

WEDNESDAY, October 18.—*Royal Microscopical Society*, 20 Hanover Square, London, W., at 8 P.M. Mr. R. I. Maddox: "Remarks on some Progressive Phases of *Spirillum Volutans*." Mr. F. Chapman: "Foraminifera of the Gault of Folkestone."

THURSDAY, October 19.—*Chemists' Assistants' Association*, 103 Great Russell Street, W.C., at 8.30 P.M. Paper: "A Pharmacist's Holiday," by W. Lloyd Williams, F.I.C.



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(See Advert., Fourth No. of this Journal each month.)

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Composed of Kepler's Malt Extract, Liebig's Beef Extract, and old Alto-Douro Port Wine. Being a standard preparation, it commands a ready and a steady sale. Order through your Wholesale House, or direct from  
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## Medical Press and Circular.

"FLETCHER'S CONCENTRATED LIQUORS are a very distinct advance in pharmacy, and incomparably superior to the one to-seven infusions, which did so much to bring concentrated preparations into disrepute. No physician need hesitate to prescribe infusions made from these LIQUORS. THEY ARE INDISTINGUISHABLE FROM THE MOST CAREFULLY PREPARED OF THE FRESH PREPARATIONS, AND THEIR EQUAL IN POTENCY."

## Editorial Comments.

### THE PATENT-MEDICINE TRADE.

FROM a return recently compiled by the Treasury by order of the House of Commons, on the motion of Mr. Conybear, giving details of the duties, taxes, and imports collected by Imperial officers, it appears that in the year ending March 31, 1893, a total number of 28,330,041 patent-medicine stamps was sold. This gives us a basis of estimating approximately the proportion of 1½d. to other medicine-stamps used. The actual revenue was 220,392l. 14s. 5½d., representing 28,330,041 bottles stamped. Had these 28,330,041 bottles borne 1½d. stamps only, the revenue would have been 177,062l. 15s. 1½d. There is, therefore, an excess of 43,329l. 19s. 4d., which represents stamps placed on bottles in excess of 1½d. each. If this 43,329l. 19s. 4d. had been laid out in 3d. stamps, it would represent 6,932,797 bottles bearing such stamps, because, although 43,329l. 19s. 4d. only equals 3,466,398 threepenny-pieces, each bottle with which



we have to deal already bears a  $1\frac{1}{2}d.$  stamp. Therefore, 6,932,797 bottles is the largest number which possibly could have been stamped with stamps of more than  $1\frac{1}{2}d.$  This leaves 23,330,041 — 6,932,797 = 21,397,244 bottles as the minimum which can have borne  $1\frac{1}{2}d.$  stamps, and the proportion of  $1\frac{1}{2}d.$  to higher stamps is therefore, at least, 21,397,244 to 6,932,797, or, say, three to one; but in view of the fact that 6d., 1s., 2s., and 3s. stamps are also used, it would seem to be a fair calculation that the  $1\frac{1}{2}d.$  stamps are four-fifths of the total number bought.

Since the above calculation was made we have been favoured by the Board of Inland Revenue with the appended details, showing the exact number of the various medicine-stamps issued in the years ending March 31:—

s. d.	1892	1893
0 1½ ..	25,566,845	24,010,766
0 3 ..	4,098,182	3,478,502
0 6 ..	826,602	708,063
0 ..	123,440	115,657
2 0 ..	20,921	16,907
0 ..	297	146
Totals	30,642,287	28,330,041

It will be observed from these figures that the decline in the proprietary-medicine business last year, already commented upon by us, was distributed among the packages of these medicines of all prices, but that the proportionate falling-off is much more marked among the dearer ones than among the "nimble ninepennies."

## THE INTERNATIONAL PHARMACOPŒIA.

WE are not surprised to hear that there is some enthusiasm in the United States in regard to the compilation and publication of an International Pharmacopœia. The soil is fresh, the plant new to it, and it is quite consistent that growth should be vigorous. A little spread-eagleism is harmless, and there is room for it in International Pharmacopœia matters, especially if those who are to manage the affair have at heart the objects to be served rather than the beating of a record. That record is not inspiring. From Brunswick in 1857 to Brussels in 1885, the International Pharmaceutical Congress took the Pharmacopœia to heart, and did something—that fact must not be overlooked. There was the big Universal Pharmacopœia of 1874, the work of French pharmacists, which set to rest, for our time at least, the idea of making all nations swallow the same medicines. Then came in 1885 Anton von Waldheim's intelligent interpretation of the London proposal to seek for "the equalisation of the strength of official preparations containing potent drugs." That also is dead, and why? Practically because pharmacists of different countries were not ripe for it, and medical men had not given it even consideration, but equally because there was no crying need for a work of the kind. Mr. von Waldheim may have erred in ranking nearly 200 drugs and preparations—from aconitine to zinc oxide—as "important" and requisite for international treatment; but that was no inconvenience had the wisdom assembled at Brussels thought the matter was urgent.

A Montreal contemporary considers that modern travel has made the need of an International Pharmacopœia more urgent, and instances the case of "Canada and the United States, between which there is a constant interchange of travel, and in which two different standards are employed for potent medicines, such as aconite, opium, cannabis indica, digitalis, &c." The tinctures of these drugs and their

strengths according to the British and United States Pharmacopœias are as follows:—

Tincture	U.S.P.	B.P.
Aconite ..	1 in 2½ ..	1 in 8
Belladonna ..	1 in 6½ ..	1 in 20
Cannabis indica ..	1 in 5 (herb) ..	1 in 20 (ext.)
Digitalis ..	1 in 6½ ..	1 in 8
Lobelia ..	1 in 5 ..	1 in 8

This list will serve very well to show what the general state of matters really is at present. Tr. aconiti rad. is almost universally 1 in 10, the greatest divergence from this being shown by the United States, and France which has it 1 in 5. In regard to tr. belladonna, England, France, and the United States differ from the strength elsewhere—1 in 10; so also in regard to tr. digitalis and tr. lobelia. There is practical agreement in regard to tr. cannabis indicæ—1 of the herb in 5 and 1 of the extract in 20 being essentially the same. It would, therefore, appear that if we got England, France, and the United States to agree, the difficulty would be settled. American and French tinctures of toxic drugs are in most cases about double the strength of what they are in European countries generally, and English corresponding tinctures are either between the two or of weaker strength than the rule. But including these instances of divergence, it is remarkable that the degree of toxicity all over is not so variable as to lead to untoward results. There are really only two preparations which need be viewed with alarm, these being liquor acidi arseniosi (*liqueur de Baudin*) and liquor sodii arseniatis (*liquor Pearsoni*). The French formula for the former calls for only 1 per mille of arsenic, while all others call for 1 per cent., and Pearson's solution varies in strength from 1 in 100 to one in 600. Except these, and perhaps the tincture of aconite, there is no other preparation of first-class importance, used internally, which should cause an intelligent pharmacist a shiver when he meets with it in a foreign prescription. The intelligence of the pharmacist has been woefully overlooked in all International Pharmacopœia discussions. We take it that any who meet with foreign prescriptions seek first to assure themselves of the potency of the preparations that are called for; in fact we have in this country a "Squire" which specially deals with this aspect of international difficulties. We have the notion, too, that people who carry prescriptions about with them from country to country are not so short of time that they pop into the first druggist's shop that meets their eye.

Altogether the risk is slight, the occasion not being enough to call for an upheaval of old national standards. Get the two or three really dangerous preparations adjusted, make France and the United States dilute their tinctures to half the present strength, and good will be done. But do not split hairs over whether things are to be 1 in 8 or 1 in 10, 1 in 100 or 1 in 120; whether we shall measure liquids or weigh them; whether drugs should be macerated or percolated: these things are not imperilling the lives of citizens or impeding the progress of therapeutics. All that is necessary can be done by the American Commission, by correspondence with the Revision Committees of Pharmacopœias which prescribe common and potent preparations in abnormal strength. Equalisation may be effected by persuasion, but we fail to see how it can be by an International Pharmacopœia.

## PROSPECTS FOR THE AUTUMN TRADE.

AUTUMN has unmistakably come upon us at last, though, alas! without bringing in its train the hoped-for improvement



in business, the arrival of which the Mincing Lane optimists had agreed to fix in the course of the present month.

The holiday-makers have all returned, and are scouring the Lane and its neighbourhood from morning till night, eager for trade; but what avails their alertness if orders are not to be had, be they never so keenly sought? And it is not only orders from wholesale traders and manufacturers that are scarce, but the spirit of speculation, which in former times often sustained the animation of the market in periods of temporary sluggishness of consumption, is now almost entirely quiescent—at any rate where drugs and chemicals are concerned. How could it be otherwise, indeed, after the innumerable disappointments that have befallen those who were fond of risking a little sum now and then by speculating in produce, through the almost uninterrupted depreciation of the stocks with which they had rashly saddled themselves? It is of no advantage to us to be told that trade is as bad or worse with our chief competitors, Hamburg, Paris, and Trieste, as it is here. That circumstance, in fact, is one of the most unpleasant features of the present commercial depression, for there exists a solidarity of interests among all business-centres which no rivalry can kill, and which causes the diminished trading-power of any market with which we have dealings to damage us to a degree corresponding with the intensity of the depression. The channels through which this damage is inflicted are often so tortuous that it is scarcely possible to trace them in practice, but however obscure they may be to the eye, their workings are clearly enough definable in the abstract.

The principal immediate cause of all the evils from which trade is sickening here is the financial chaos in the United States. It is even now doubtful whether the disastrous Sherman Act—which has filled the American Treasury with immense hoards of a metal depreciating with such rapidity that continued adherence to the provisions of the Act is almost certain to land one of the most powerful countries of the earth into something resembling national bankruptcy—will, after all, be repealed, or whether some compromise, that will at best prolong the inexorable end, may not be adopted at the eleventh hour. Until the Act is absolutely swept away, however, no lasting amelioration in the business with the United States can be expected. At present, enterprise in that country is almost completely paralysed, and merchants cannot, or will not, purchase a dollar's-worth of goods beyond those which they absolutely need. At our drug-sales this week the singular spectacle was witnessed of the offering of a parcel of no less than 47 cases of gamboge, and another of 20 cases of cardamoms, which had been returned by American houses to be realised in London, although the drugs were originally imported from this country. The fact that the owners of drugs of such general consumption should have been compelled to return them from America to London in order to render their sale possible is the clearest possible evidence of the scarcity of money and the absence of business-confidence in the United States.

The commotion from which Brazil is now suffering acutely, and which is also making itself felt unpleasantly in one or two other Latin-American Republics, also closes for a time, at any rate, one of the few large foreign markets where we still hold our own without serious challenge.

The improvement in the export drug-trade with Russia, which was expected to take place as a result of the increase in the Russian import duties on goods from Germany, has not quite answered expectations up to the present. The heavy-chemical trade has, no doubt, benefited considerably by the Russo-German tariff war; but the London wholesale druggists have hardly a share in that trade, which is nearly

all transacted, either directly by the manufacturers, or through a few chemical agents mostly located in the North of England and in Scotland. It is true that the export business from London to Russia in staple goods of colonial origin, including spices and drysalteries, has also profited considerably; but this department, also, is scarcely within the domain of the wholesale drug-trade properly speaking. In their competition with London all Continental ports are assisted powerfully by their lower dock and warehouse charges, and by the well-planned and orderly manner of their arrangements for receiving and shipping goods, compared with the chaotic and costly confusion which prevails in that department of London. So long as this condition of things is allowed to continue, the Metropolis must suffer, and it is really astonishing that so much of her mere transit trade in foreign goods still remains. The volume, however, is not growing satisfactorily, and this year the figures show a serious decrease, the declared value of the country's exports of "foreign and colonial merchandise" during the nine months ending September 30 being only 45,906,463*l.*, as compared with 46,784,129*l.* in the same period of 1892.

#### AN ADVANCE IN INFLUENZA.

The last Local Government report on influenza was disappointing. Dr. Klein failed to convey the disease to rabbits by inoculation—at least, his experiments were considered by Dr. Thorne Thorne to be nugatory. In curious contrast with this comes a report that Bruschettini has not only succeeded in infecting rabbits with influenza by means of inoculations of *Bacillus influenzae*, demonstrating that the fever arising closely corresponded to the symptoms in man, but he has actually vaccinated the animals against infection, and has succeeded in this also. The material used for this purpose was serum from the cultures of the bacillus filtered through a Berkefeld filter. The serum also possesses the property of conferring on other animals immunity both against the infection and intoxication produced by cultures of the bacillus. This property is so powerful that injections of the serum in the proportion of  $\frac{1}{42000}$  of the body weight suffice to induce immunity, or perhaps even less. The serum has also a marked curative action, reducing the temperature of already affected animals, and preventing an otherwise certainly fatal issue.

#### LORD HEYTESBURY.

A correspondent directs our attention to the motto which Lord Heytesbury, the noble baron whose treatment of a serf we noticed last week, sports amid his heraldic bearings, "*Grandeseunt aucta labore.*" A very good motto indeed, and one which appears to be religiously observed on the Heytesbury estate, only unfortunately the idea there seems to be that one man should do the flourishing and another the labouring.

#### HUMOURS OF THE WHOLESALE TRADE.

A London wholesale drug-house had an order a few days since for "50 lbs. tin can." Thinking their customer had omitted something they sent the order back asking him to kindly state what the can was to be filled with. Probably with a smile of pity for the dulness the chemist returned the same order but this time extended the last word so that it read "50 lbs.  $\frac{1}{2}$  tin canthar."

Another wholesale house was asked some time since to send, with other goods, a bunch of white, and a bunch of black grapes. They procured these and supplied them, and a little later observed in a local paper that their customer had taken first prize for grapes at a local horticultural show.

But the laugh is not always on the side of the wholesaler.



A chemist in a specially enlightened Midland town tells us that he recently wrote an order for "5j. emp. saponis fuscum," and sent it to an old-established business. The principal, a druggist of over thirty years' experience, when he looked at it, said he had some of the stuff on moleskin, but had never seen any on fuscum.

#### PASTEURISING RABIES.

Last year 1,790 persons underwent the Pasteur treatment in Paris for the prevention of potential or problematical hydrophobia. Of these 1,584 were from France and Algeria, 69 from Portugal, 28 from England, 19 from Greece, 14 from Spain, and the same number from Holland, 12 from Egypt, 11 from Belgium, 9 from India, 3 from Switzerland, and 1 each from Russia and the United States. Of the persons treated 1,190 were bitten by dogs proved to be afflicted with rabies. Since the beginning of the Pasteur treatment in 1886, the mortality from bites on the head after treatment is stated as 1.48 per cent., from wounds on the hands 0.55, and 0.24 per cent. from bites on the limbs. Altogether 12,782 cases have been treated. What strikes us as remarkable about the figures is the comparatively small number of persons from other countries than France who submit to the treatment. This may be accounted for in some measure by the foundation of Pasteur Institutes in some of these countries. But if a case every fortnight from the United Kingdom is to be taken to represent anything approaching our actual need, that is a most striking proof of the value of preventive treatment by muzzle.

#### THE NEW ITALIAN PHARMACY BILL.

A correspondent of the Vienna *Pharmaceutische Post* gives particulars of the new Italian Pharmacy Bill, the chief points of which are the following:—There has for many years been a great scarcity of qualified pharmacists in the rural districts of Italy, probably on account of the fact that the majority of villages are too poor and small to afford a livelihood such as a trained chemist can command in the cities. To remove this difficulty Signor Martini, a member of the Italian Ministry, drew up a Pharmacy Bill introducing the system of major and minor examinations (for the degrees of "Doctors of Pharmacy" and "Practical Pharmacists" respectively), the former class to consist of University graduates, the latter of persons who, though not University men, could prove themselves sufficiently acquainted with practical pharmacy to deserve a diploma. Pharmacists of the second class must be 21 years of age; they will be required to show that they have successfully passed through the pharmaceutical section of one of the technical educational institutes, and must pass a year behind the counter in a pharmacy indicated by the authorities. Pharmacists of the first class are to be allowed to practise their profession in any part of the kingdom; those of the second may only establish business in certain districts indicated by the Ministry of the Interior, whereas outside these they will only be allowed to act as assistants of first-class men. The Bill has been submitted to a commission of experts consisting of Senators Mezzanotte, Cannizzaro, Paterno, Auriti, and Todaro, who have reported favourably upon it. The measure, however, has created a great deal of opposition among pharmacists, and the pharmaceutical students of Naples University have wired to Professor Paterno asking him to defend their interests.

**INTERNATIONAL CHEMICAL CONGRESS.**—An international congress of practical chemists will be held in Brussels on August 4, 1894. The question of the examination of foods and drugs is to occupy a considerable part of the attention of the gathering. M. Van Laer, 15 Rue de Hollande, Brussels, will act as general secretary.

### Business Changes.

NEW drug-stores have just been opened at 23 Broadway, Ealing, W.

MR. C. C. WILLISHER has opened a pharmacy at 10 The Parade, Forest Hill, S.E.

MR. MOSS, chemist, has purchased the business of Mr. Balch, Queen Street, Ramsgate.

MR. MASON, chemist, of Parson's Green, S.W., has sold his business to Mr. Frost, late of Lee, Kent.

MR. MASON, chemist, has purchased the business of Watts & Co., 114 Church Road, West Brighton.

MR. SMITH, chemist and dentist, 1 Archer Street, W., has taken a partner of the same name in the chemist business.

MR. PASMORE, of Tottenham Court Road, has purchased the business of Mr. Hoare, Blackstock Road, Highbury, N.

MR. JOSEPH ROSE, lately with Messrs. Jewsbury & Brown, Manchester, has opened a pharmacy in the Station Road, Urmston.

MR. SADLER, late of High Street, Stoke Newington, N., has purchased the business of Mr. Laing at 3 Wightmans Road, Harringay, N.

MR. HARRISON, of Addison Park, W., has sold his business to Mr. Eglington, chemist. Mr. Harrison is about to open a pharmacy in the High Road, Chiswick.

MR. BLUETT, for many years manager to Broad & Co., chemists, James Street, Westbourne Terrace, Hyde Park, W., has opened a pharmacy in the same street.

THE plant and apparatus of Bo'ness Chemical-works have been sold to Mr. W. R. Fairlie, Douglas Street, Glasgow. The buildings and ground, however, are still retained by Mr. Hughes.

MESSRS. CALLOWAY & VERNON, chemists, Notting Hill Gate, W., have sold their business to Mr. Fuller, chemist. Mr. Vernon has opened a pharmacy at Victoria Parade, Surbiton, Surrey.

MESSRS. HEADLAND & CO., chemists, have closed their shop in North Street, Brighton, and purchased Mr. Goynne Stevens's pharmacy a few doors higher up, which has been greatly improved and altered.

MR. CHARLESWORTH, of 12 Holcroft Pavement, Fulham and Mr. Cresswell Collen, of St. John's Road, Clapham Junction, have purchased the business of Mr. Andrews, of 113 Daws Road, Fulham, S.W. (the Red Cross Pharmacy).

MESSRS. GOLDTHORPE & COOK, chemists, Hare Street, Woolwich, have purchased the business of Mr. Howorth, of 70 Herbert Road, Plumstead, S.E. Mr. Howorth has gone to his branch business in St. James's Street, Plumstead.

THE LIQUOR CARNIS COMPANY (LIMITED) will, on October 16, remove their London offices from Holborn Viaduct to their City warehouse at 28A Farringdon Street, E.C. Their works and chief offices are at Aston Clinton, Bucks.

MR. F. THORNLEY, pharmaceutical chemist, of 81 North Street, Ripon, who is leaving England for Australia, has sold his business to Mr. Coverdale, of York. It will be carried on under the style of Coverdale & Co. Mr. Cockerill, late manager of Mr. Coverdale's Gilligate branch, will have charge of the Ripon business. Mr. J. A. Robertson succeeds Mr. Cockerill.

MESSRS. DAUBE, HENCKEL & CO., of Hamburg, announce that the European representation of the firm of Daube & Co., in Valparaiso and Santiago (Chile) has devolved upon them in consequence of the death of the late Mr. A. Teichmann. The Hamburg house consists of Messrs. Johannes Daube, Carl Kahler (these two being also partners in the Chilean firms), and Albert Henckel.

In severe paroxysms of coughing, from whatever cause, a tablespoonful of glycerine in hot milk or cream will give speedy relief.



## Legal Reports.

### ACTION UNDER THE APOTHECARIES ACT.

AT Cardiff County Court, on October 5, before his Honour Judge Owen, the Society of Apothecaries sued Mr. Charles Graves, a homoeopath, of Cardiff, to recover a penalty of 20*l.* for illegally practising as an apothecary.

Mr. Rogers, of Birmingham, appeared for the plaintiffs, and Mr. Bailhache, of Newport, for the defendant.

His Honour: Is not this exactly the same case as was brought by the Pharmaceutical Society some time ago?

Mr. Rogers said it was against the same defendant, but under a different Act.

His Honour: How is it that two bodies can enforce the penalty?

Mr. Rogers said the Pharmaceutical Society dealt with chemists and druggists, and the Apothecaries' Society with medical men. Mr. Rogers having explained the Act,

Mr. Bailhache said there was no defence in substance to this case, but he desired to say that this man had been prosecuted before the Magistrates for practically the same thing.

Mr. Rogers: No.

Mr. Bailhache: For practically the same thing, and had been fined. He also wanted to say what this man's qualifications were, as he should have to ask his Honour to impose a mitigated penalty.

His Honour: Have I the power to mitigate the penalty?

Mr. Rogers: No.

His Honour asked Mr. Bailhache if he suggested that he (the Judge) had any power to mitigate the penalty?

Mr. Bailhache said he did not know, but he was afraid not. He would put his client into the box, in order that he might tell his Honour how near he had got to being qualified.

Defendant was then called, but did not answer.

Mr. Bailhache said it would have been some satisfaction probably to his Honour to know how near the defendant was to being qualified, but as he was not present that could not be done.

His Honour: A miss is as good as a mile in this case.

Mr. Bailhache said the defendant had only his final examination to pass, so that this was not the case of a man who was a mere quack. Unfortunately, in order that he might get a living, defendant had commenced to practise before he was entitled to do so. The people, however, whom he had doctored in this case had sustained no particular harm, because the medicines were homoeopathic.

Mr. Rogers: The medicines were not taken.

Mr. Bailhache: That was one very good reason why they did no harm. Another reason was that these men had nothing whatever the matter with them, but were strong robust men, who were instructed to go to this unfortunate Charles Graves, and simulate various nasty diseases, which they did very successfully, and for which the defendant treated them. They were in fact in the position of common informers, and the end of it was that the defendant was brought before the Cardiff Magistrates early in the year, Mr. Rogers appearing in the case, and these self-same men who were witnesses now gave evidence then. Defendant on that occasion was fined for wrongfully calling himself a doctor. That was practically the whole gist of the case.

Mr. Rogers: He claimed to have a degree. It was a prosecution under the Medical Act of 1858.

Mr. Bailhache said that was a prosecution for what was in substance the same offence as was now alleged. It was true the proceedings were brought under a different Act, but he submitted it became a prosecution to summon a man under one Act before the Magistrates, and then for the same offence to bring him under a different Act before his Honour.

His Honour said he was bound to enforce the law as he found it, and must give judgment for 20*l.* and costs.

Mr. Rogers asked for costs on the higher scale.

Mr. Bailhache: Really now, Mr. Rogers—

His Honour: No; I think not. I can't do that.

Mr. Bailhache: I think you have jurisdiction to fix the time within which the money is to be paid.

His Honour: I have no power except by consent.

Mr. Bailhache: I am afraid I am in the power of a very hard man.

### UNSTAMPED SCALES.

AT the Petworth Petty Sessions, on October 7, L. N. Corden, chemist and druggist, Pulborough, was fined 6*s.* 6*d.* for using unstamped scales.

### INFRINGEMENTS OF THE PHARMACY ACT.

AT Tunbridge Wells County Court on October 5, before his Honour Judge Homersham Cox, the Pharmaceutical Society sued Messrs. Cullen and Gain, grocers, for 5*l.* penalty, for selling chlorodyne. Mr. Gain attended on behalf of the firm, and said they should not defend the action, as the man who sold the drug (chlorodyne) had done so without instructions. The penalty would be paid into court. His Honour, in view of this admission, did not call for evidence, and allowed the Society the penalty, with costs.

AT the Leeds County Court on October 4, Mr. John Parker, grocer, of Picton Place, Armley Road, defended an action brought by the Pharmaceutical Society of Great Britain. Mr. Grey, barrister, appeared for the Society. It was alleged that defendant had on two occasions sold poison without being registered and thereby authorised to do so. In June last a little girl named Mosley went to his shop and purchased some oxalic acid, and on the 10th of the same month Mr. G. D. Telford was supplied with a quantity of laudanum at the same shop. Mr. Parker submitted that he had sold the acid to take stains out of clothing, and in ignorance that he was committing a breach of the Act. His Honour said he must order defendant to pay the penalty (5*l.*) in each case, but would allow him to do so at the rate of 1*l.* per month.

A case against Arthur Goodall, grocer, Meanwood Road, for a similar offence, had been heard some time ago in London, and adjourned for legal argument. As no further instructions had been given to the solicitor appearing in the case, his Honour made out an order for the immediate payment of the penalty of 5*l.*

ON October 2, at the Wandsworth County Court, the action of the Pharmaceutical Society of Great Britain *v.* Hill came before his Honour Judge Lushington. Mr. T. R. Grey, who appeared for the Society, stated that it was an action to recover from the defendant a penalty under section 15 of the Pharmacy Act of 1868, for, on June 16, 1893, selling poison, he not being a duly-qualified chemist and druggist. At the time of the offence the defendant was an assistant at 39 George Street, Richmond. Notice had been received that morning by his (plaintiff's) solicitor that the defendant had paid the penalty into court. He now asked his Honour to deal with the question of costs. His Honour granted costs, remarking that it was the great importance of the case that led him to do so.

AT the Blackburn County Court, on October 9, Robert Hargreaves, grocer, of 27 Union Road, Oswaldtwistle, was sued by the Pharmaceutical Society for 5*l.*, the penalty incurred for retailing a poison—oxalic acid—a poison which he, not being a chemist, could not lawfully sell. Mr. Grey appeared for the Pharmaceutical Society.

Arthur Oswald Foulis, an inquiry agent, of Salford, stated that he went to the defendant's shop on June 26, and purchased a small quantity of oxalic acid. The defendant's wife supplied him, and remarked at the time that she had to be very careful to whom she sold it, as a person in the village had swallowed some the previous week. Witness added that cases of illegal sale of poisons had been very frequent of late in Oswaldtwistle and the neighbourhood.

Defendant stated that he was ill in bed on the date on which the poison was alleged to have been bought, and that he knew absolutely nothing about it.

Mrs. Hargreaves swore that she never supplied Foulis with the poison, and that she never had any in her shop.



His Honour: The evidence is rather too strong for you. There is no reason why Mr. Foulis should concoct this story about you. You will have to pay the penalty of 5*l*.

#### MALT VINEGAR ASKED FOR.

AT Hanley Petty Sessions, last week, a general dealer, named Wells, was summoned for selling vinegar which Mr. James Baines, the borough analyst, found did not contain more than 25 per cent. of malt vinegar, the rest being diluted and coloured acetic acid. In cross-examination, witness said his analysis was quite consistent with the vinegar being a pure vinegar brewed from sugar, and he found nothing to lead him to suppose that there had been any concoction or improper addition. Mr. Champneys, who defended, submitted that the article supplied so closely resembled malt vinegar that there was no prejudice to the purchaser. Defendant said the inspector asked for vinegar only, and not for malt vinegar, but the Stipendiary came to the conclusion that malt vinegar had been asked for, and fined defendant 20*s*. and costs.

#### THE MERTHYR VINEGAR CASE.

IN our issue of September 2, page 359, we reported particulars of proceedings against Richard Casy, a grocer, in respect to the sale of malt vinegar which Dr. W. Morgan, public analyst, certified to be adulterated with "80 per cent. of dilute pyroligneous acid." For the defence Mr. Fredk. Davis, of Newington (arseway, S.E., maintained that the sample was pure vinegar, and the Magistrate adjourned the case in order that the Somerset House authorities might give their opinion. This was received last week, and duly came before the Magistrate who, finding it corroborate the evidence of Mr. Davis, dismissed the case. The report, which was signed by Messrs. R. Bannister, F.I.C., F.C.S., and G. Lewin, F.I.C., certified that the result of the analysis was as follows:—

Acetic acid .. .. .	4.52 per cent.
Dry solids .. .. .	4.81 "
Mineral matter (ash) .. .. .	1.032 "
Combined phosphoric acid .. .. .	.014 "
Specific gravity .. .. .	1.025-25

"From a consideration of the results of the analysis," continues the report, "including an examination of the constituents of the ash and the extractive matters, we are of opinion that the vinegar does not contain pyroligneous acid, but that the acetic acid present is derived from the acetification of the alcohol produced by fermentation in the manufacture of the vinegar; and we are further of opinion that the sample corresponds to a commercial vinegar made from malt and grain, and other starch products."

#### WAS THIS THE SAME KIND?

AT the Caerphilly Police Court on Tuesday, a greengrocer named William Hughes, of Nelson, was summoned for having sold malt vinegar which was adulterated with 70 per cent. of diluted pyroligneous acid to the prejudice of the purchaser.

Dr. William Morgan, public analyst for Glamorgan, testified from his analysis that the sample was not malt vinegar. The specific gravity was 1.0255, the acetic acid 4.02 per cent., and the extractive matter 4.79 per cent., residuum or ash 1.29 per cent.

Cross-examined: He placed no great weight on the specific gravity of this vinegar, because it might vary. The phosphoric acid was 0.0142 per cent., from which he calculated the percentage of malt vinegar in the sample as 30. He admitted that acetic or pyroligneous acid was an essential constituent of vinegar, but he could not definitely say that the acid in the sample was pyroligneous.

Mr. Samuel Chivers, of Cardiff, who supplied the defendant with the vinegar, gave evidence. He said no manufacturer ever used more than 7 per cent. of malt to convert the starch in the raw grain into sugar when it became soluble. Pure acetic acid would not form a fungus, but his vinegar would do so. From a commercial point of view, it would cost the manufacturer more to put acetic acid into the

vinegar than to complete the manufacture by vineous fermentation.

Mr. Otto Hehner said he had inspected the works of Mr. Chivers, and found that although he did not make a malt vinegar he manufactured what was generally accepted as a pure and genuine vinegar.

The Magistrates fined the defendant 5*s*. and costs.

#### THE SALE OF KAY'S ESSENCE.

ON Thursday, in the Southern Divisional Police Court, Dublin, Mr. Swift gave judgment in the case of the Pharmaceutical Society *v.* Leonard. The summons, it will be remembered, was brought against Mr. Leonard, a grocer and general merchant, for having sold a bottle of "Kay's essence of linseed," it being a compound which contained certain of the scheduled poisons, the sale of which is prohibited by the Pharmacy Act of 1875 by persons who are not chemists. [The case will be found reported fully in our issue of September 23 last.] The Magistrate dismissed the summons, holding, first, that the compound came within the meaning of section 31 as a patent medicine; and secondly, that while the specification might have been more precisely followed, the compound had been made up in conformity with it. He gave no costs, as he was judicially aware that both cases had been brought on as test-cases.

### Trade Notes.

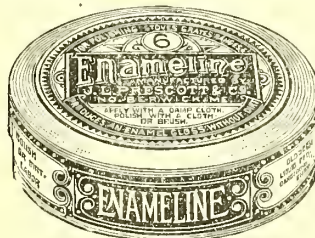
MESSRS. BURROUGHS, WELLCOME & Co. inform us that they have received a cable from Chicago, stating that they have obtained the highest award for their goods at the World's Fair.

MESSRS. W. H. WILLCOX & Co., engineers-store makers of Southwark Street, have purchased a large part of the stock of Messrs. Pontifex & Wood (Limited), of Shoe Lane, who are retiring from business.

MESSRS. SEABURY & JOHNSON, of Orange, N.J., and New York City, have been awarded the medal and diploma for their exhibit of plasters and surgical goods at the World's Fair. Messrs. Fassett & Johnson, their agents in London, inform us that they have had a cablegram to that effect.

FROM Messrs. John Davis & Co. (Limited), of the Old Kent Road, we have specimens of their toilet almanac for 1894, and of their "Domestic Year-book" for 1894. The first-named is a daintily-printed little book of 32 pages, with almanac toilet notes, health notes, companion to the medicine-chest, postal regulations, and blank pages for memoranda, with space for several pages of the chemist's own announcements; the "Domestic Year-book" is a 32-page octavo pamphlet, with an almanac and interesting reading-matter, attractive illustrations, and space for six pages of speciality announcements.

MESSRS. W. B. FORDHAM & SONS (LIMITED), of King's Cross, have taken up the London agency for an American



article called "Enameline," a stove-polish, sold in 1*½* and 2*½* *z*. tins. It is stated that every family in London and its suburbs is to be presented with a sample tin of this article.

AMONGST the provisions which Dr. Nansen has taken with him on the North Pole expedition are 1,500 lbs. of Cadbury's cocoa.



## Scientific Notes:

On Chemistry, Pharmacy, Botany, Materia Medica, &c. Original, Selected and Translated.

## BISMUTH-PHENOL.

VON HEYDEN'S SUCCESSORS have patented in England their process for making bismuth-phenol. It is as follows:—A solution of 38 parts of phenol in 400 of water and 16 parts of sodium hydrate are mixed by thorough stirring with 49 parts of bismuth nitrate. The precipitated compound is boiled with water, washed, and dried, and forms a greyish-white powder containing about 80 per cent. of  $\text{Bi}_2\text{O}_3$ . Several compounds of a similar nature are included in the patent (No. 13,291, 1892).

## OL. MACIS EXPRESSUM.

APOTHEKER HILGER, of Munich, has recently reported that the fat of Bombay mace prepared by the precipitation method contains no myristic acid. The yellow colour, which is readily soluble in alcohol, is only after considerable trouble obtained free from adherent fat and dextrose, and is found to have the characteristics of a quinine. It readily reduces silver-nitrate solution, and this reaction is so characteristic that we can always recognise Bombay mace by it.

## ASH AND MOISTURE IN DRUGS.

DIETERICH, in his annual report for 1892 (which has been recently issued), gives the following figures for commercial powdered drugs, which have been determined in his own laboratories:—

Powder of	Per cent. Water	Per cent. Ash	$\text{K}_2\text{CO}_3$ , in 100 Ash
Cathartidis .. .. .	12.45	6.55	—
" .. .. .	7.30	10.55	—
" .. .. .	8.85	8.20	—
" (Chinese) .. .. .	11.40	4.00	—
Fol. sem. Alexandr. ..	7.55	9.20	—
" .. .. .	9.70	14.70	21.12
" .. .. .	14.15	15.75	5.47
" .. .. .	8.05	15.25	11.65
" Timevely .. .. .	14.50	9.70	10.66
" .. .. .	7.75	10.80	22.35
" .. .. .	7.85	11.30	12.52
Herb. conii .. .. .	7.15	18.60	29.62
Fol. digitalis .. .. .	11.05	12.85	16.78
" .. .. .	6.40	11.25	39.86
Rad. iridis .. .. .	12.05	4.55	34.07
" glycyrrhizae .. ..	6.75	5.60	a trace
" .. .. .	13.50	4.80	14.59
" .. .. .	5.75	5.30	11.39
" rhei .. .. .	12.00	8.30	16.50
" .. .. .	5.60	8.40	31.80
" .. .. .	5.05	8.20	28.19

## ALKALOIDS OF HYDRASTIS CANADENSIS.

MR. F. A. THOMPSON, one of Parke, Davis & Co.'s chemists, in a paper recently communicated to the Michigan Pharmaceutical Association, gives some results of assays of golden seal root. They reveal the fact that the quality of the root is fairly constant, as the following table shows:—

Number	Per cent. Berberine Calculated from dried (195° C.) berberine Muriate	Per cent. Hydrastine by Weight	Per cent. Hydrastine by Titration with $\frac{n}{1000}$ Sulphuric Acid
1	3.3	2	1.76
2	4.15	2.8	2.50
3	3.13	2.52	2.3
4	3.24	2.32	2.1
5	3.48	2.7	2.5
6	3.89	2.48	2.25
7	4.05	2.8	2.5
8	3.0	2.3	2.18
9	3.1	2.3	2.16
Average ..	3.48	2.47	2.27

The results are much higher in berberine and hydrastine than any previously recorded.

## MEXICAN VALERIAN.

MR. RAPHAEL McLAUGHLIN has analysed the valerian-root which grows in Mexico, and finds that, although it is from the same plant, it is much more aromatic than the European drug. It yields between 3 and 4 per cent. of volatile oil and about 1 per cent. of valerianic acid, as well as 4.3 per cent. of oleo-resin (*Am. Journ. Pharm.*). The roots are found in the Mexican market either in slices or fleshy discs, from  $\frac{1}{2}$  inch to  $1\frac{1}{2}$  inch in diameter, or in voluminous tubers; externally greyish, internally yellowish; hard and tough; fracture granular when dry; possessing an unpleasant odour and a bitter taste.

## SENNA.

MR. OSCAR C. DILLY, Ph.G., read a useful paper at the Kentucky Pharmaceutical Association on the comparative value of Alexandrian and Tinnivelly senna, basing his remarks upon determinations of the cathartic acid contained in each (*Amer. Drug. Rec.* 13). Allowing for all the uncertainty that surrounds the active principle of senna, the results are still comparable, and according to them the Alexandrian appeared in a more favourable light than the Tinnivelly. The average yield of cathartic acid from Alexandrian senna was 0.9 per cent.; that from the Tinnivelly 0.6 per cent. This difference was not borne out, however, by the results obtained on separating the cathartic acid of Witte—the substance consisting of magnesium cathartate and calcium cathartate. The average yield of this product from the Alexandrian senna was 1.4 per cent., that from the Tinnivelly variety 1.1 per cent., or about one-fifth less. In addition to containing a larger percentage of the main active constituent, Alexandrian senna is of greater value in manufacturing the liquid preparations of the drug, for the reason that it contains a much smaller percentage of gummy matter, and is accordingly easier and more quickly extracted than the Tinnivelly variety. Tinnivelly senna has two advantages over the Alexandrian variety: one is its appearance and the other its price. The Tinnivelly variety is cleaner, and, being much less brittle, is unbroken, and, in addition to being longer, is seemingly fresher. A safe conclusion is to recommend the use of the Tinnivelly variety for sale at the counter on account of its handsome appearance, and the use of the Alexandrian variety in the manufacture of senna preparations on account of its greater strength and easier extraction.

## KAMALA.

MR. A. G. PERKIN, in a paper communicated to the Chemical Society, gives a description of six distinct substances extracted by ether from kamala—rottlerin, the principal constituent, described by Anderson in 1855; isorottlerin; two resins, one of low, the other of high, melting-point; a wax, which is possibly cetyllic cerotate; and a yellow, crystalline colouring-matter present in a minute proportion, the composition of which has yet to be determined.

*Rottlerin* is best separated from the dye-stuff by means of cold carbon bisulphide, from which it crystallises in thin salmon-coloured plates melting at  $191^\circ$ ; its composition is represented by the empirical formula  $\text{C}_{11}\text{H}_{10}\text{O}_3$  already assigned to it by Anderson, but it is undoubtedly a substance of high molecular weight. It yields a diacetyl derivative. On boiling it with alkalis, an odour of benzaldehyde is apparent. When oxidised by cold nitric acid, it yields two acids represented by the formulæ  $\text{C}_{17}\text{H}_{14}\text{O}_9$  and  $\text{C}_{17}\text{H}_{16}\text{O}_9$ , while boiling nitric acid converts it into a dibasic acid of the formula  $\text{C}_{13}\text{H}_{10}\text{O}_9$ .

*Isorottlerin* closely resembles rottlerin in appearance, but melts at  $198-199^\circ$ , and is practically insoluble even in hot carbon bisulphide; moreover, no odour of benzaldehyde is apparent when it is boiled with alkali. It yields the acid of the formula  $\text{C}_{13}\text{H}_{10}\text{O}_9$  on oxidation.

The resin of low melting-point resembles rottlerin, with which it is evidently closely allied, in most of its properties; its composition is represented by the formula  $\text{C}_{13}\text{H}_{12}\text{O}_3$ ; on oxidation, it yields the acid of the formula  $\text{C}_{13}\text{H}_{10}\text{O}_9$ .

The resin of high melting-point is a light-yellow coloured substance represented by the formula  $\text{C}_{13}\text{H}_{12}\text{O}_3$ , and also resembles rottlerin in many of its properties, being converted into the acid of the formula  $\text{C}_{13}\text{H}_{10}\text{O}_9$  when boiled with nitric acid.



## Bankruptcies and Failures.

*Re* J. E. JONES, Barry Dock, Chemist and Druggist.

AN adjourned meeting of the creditors of this debtor was held at the offices of the Official Receiver (Mr. T. H. Stephens), in Queen Street, Cardiff, on Thursday. The sureties named by the debtor as willing to guarantee the payment of a composition of 7s. 6d. in the pound were reported to be satisfactory, and the offer was accepted.

*Re* FREDERICK AINSWORTH DOBSON, 34 Bridge Street, Birkenhead, Chemist.

THIS debtor came up for public examination at the Birkenhead Bankruptcy Court on October 4. His debts were 180*l.* 4*s.* 6*d.*, and assets 141*l.* 5*s.* 8*d.* In examination by Mr. Ring he stated that he commenced business in June, 1888, the business being purchased for him by his father for 300*l.* He had no capital of his own, and had previously been a chemist's manager. At the time he commenced business the takings averaged 9*l.* a week. He worked up the business, and one year, when he had a large oil-contract the takings, were 900*l.* Since 1891 it had gradually gone down, and this he attributed to the depression in trade and to the neighbourhood changing. He did not consider that he himself, through neglecting the business, was entirely the cause of it going down. It might to some extent be his own fault. His furniture had been sold to his brother-in-law because there was a distraint upon it. His interest under the will of his father he had sold to his sister for 360*l.*, which had all gone to pay trade debts. The examination was closed.

*Re* FLETCHER ATKINSON JOHNSON, 26 Farcliffe Road Manningham, and 30 Darley Street, Bradford, Chemist.

THE Official Receiver for the Bradford district has issued particulars under this bankruptcy. The liabilities amount to 5,831*l.* 11*s.* 9*d.*, and assets to 528*l.* 11*s.* 3*d.* The Official Receiver states that "the debtor commenced business about twenty years ago as a chemist and druggist, in Kirkgate, Bradford, and filed a petition for liquidation in 1879, when his liabilities amounted to 1,545*l.*, and the assets to 885*l.*, his creditors receiving a composition of 4*s.* in the pound. He received his discharge under that bankruptcy on August 14, 1879. He has since conducted his business successfully with a turnover of from 800*l.* to 1,000*l.* per annum. He informs me that it has become necessary to file his petition now in consequence of losses arising from speculations on the Stock Exchange. These transactions commenced in 1889, and he states that they have resulted in a loss of over 3,200*l.* His landlord distrained for rent about three weeks ago, and he saw no possibility of discharging his liabilities. He has kept a cash-book and sold-ledger. He has been adjudicated bankrupt, and does not intend to submit any offer of composition to his creditors."

The statutory meeting of the creditors under this failure took place on Monday last, when it was decided to appoint Mr. William Lawson as trustee of the estate, with a committee of inspection.

The following are the principal creditors:—

	£	s.	d.
Ackroyd, O., Bradford .. .. .	1,365	4	0
Bankers' Claims .. .. .	175	0	0
Beck, Miss, Bradford .. .. .	3,323	0	0
Davy, Yates, & Co., London .. .. .	20	10	10
Holmes, John, Bradford .. .. .	40	0	0
Johnson, Miss, Chester .. .. .	300	0	0
Ladmore, E. J., Bradford .. .. .	66	0	0
Lingard, Henry, Bradford .. .. .	109	0	0
Old Post Office Stores, Bradford .. .. .	20	0	0
Southern Land Company, London .. .. .	25	0	0
Whaley, O., Bradford .. .. .	50	0	0
Wolstenholme, —, Sheffield .. .. .	21	0	0
Wood, Holdsworth, & Co., Bradford .. .. .	25	2	0

### Preferential Creditor.

Holmes, J., Bradford .. .. .	95	0	0
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*Re* JANE IBBOTSON, Wakefield, Chemist.

THE following are the principal creditors in this bankruptcy:—

	£	s.	d.
Bankers' Claims .. .. .	26	12	0
Bleasdale, William, & Co. York .. .. .	36	5	7
Blundell, Spence & Co., Hull .. .. .	28	0	5
Bunt, R. W., Wakefield .. .. .	30	1	0
Evans, Sons & Co., Liverpool .. .. .	47	6	5
Gloynce, S. C., Wakefield .. .. .	11	11	1
Hartley, Brewer & Co., Hull .. .. .	15	8	10
Hirst, Brooke & Co. Leeds .. .. .	34	1	2
Kingswell, W. H., Wakefield .. .. .	26	16	1
Lister, Pickersgill & Rowland, Wakefield .. .. .	73	0	9
Midland Vinegar Company, Birmingham .. .. .	43	18	0
Raines & Co., York .. .. .	17	0	2
Rolley, R. & G., Eary St. Edmunds .. .. .	10	0	0
Sanderson & Clayton, Wakefield .. .. .	10	14	2
Sanger, John, & Sons, London .. .. .	12	11	3
Sissons Brothers & Co., Hull .. .. .	13	14	9
Slatter, W. A., Wakefield .. .. .	17	10	0
Summer & Co., Liverpool .. .. .	27	10	3
Todd, W. R., & Sons, Hull .. .. .	62	15	

## Personalities.

MR. SAMUEL MARTIN, pharmaceutical chemist, at present manager for C. & J. Montgomery, chemists, Royal Avenue, Belfast, has been engaged to represent Messrs. John Clark & Co., Belfast.

MR. JOHN HUNTER, Lecturer on Chemistry at the Minto House School of Medicine, Edinburgh, has been elected to the vacant post of Examiner in General Chemistry in the Aberdeen University.

IT would be difficult to beat the *clientèle* which Mr. Squire, the English pharmacist at San Remo, brings to his galenic shrine during the season. Amongst his customers are one emperor, two empresses, two kings, three queens, and many princes and princesses, our own Albert Edward being one of the number. Mr. Squire has returned to San Remo after his summer holiday in England and the Alps, and awaits the commands of his aristocratic customers.

MR. A. G. GAMBLE, chemist and druggist, and Mayor of Grantham, signalled the approaching close of his year of office by giving a banquet at the Guildhall, on Thursday evening, October 5, to some 150 of the principal residents of the town. The event is described locally as one of the most brilliant and successful gatherings which have taken place in Grantham. The dinner, the speeches, and a programme of vocal music rendered by the Waring Quartette Party from Nottingham, gave great satisfaction.

## MARRIAGE

NEWTON—BLADES.—On October 7, at St. Helen's Church, Witton, Northwich, by the Rev. W. H. Binney, Arthur Newton, chemist and druggist, Yeovil, Somerset, to Minnie Blades, eldest daughter of Charles M. Blades, F.C.S., Northwich, Cheshire.

## DEATHS.

SMITH.—On September 25, Robert John Smith, chemist and druggist, London. Aged 46.

THACKER.—On October 2, at the residence of his mother 171 Rathgar Road, Dublin, Robert Edward, elder and last surviving son of the late Robert Thacker, of Dublin, late of the firm of Thacker & Hoffe (Limited), wholesale druggists, Dublin. Aged 39.

WILD.—On September 25, Frank Wild, chemist and druggist, Manchester.

WILSON.—On September 22, Isaac Wilson, chemist and druggist, Oswaldtwistle. Aged 38.

WILSON.—On September 29, Alexander Wilson, chemist and druggist, Greenock. Aged 30.



## A DISPENSARY IN TANGIER.

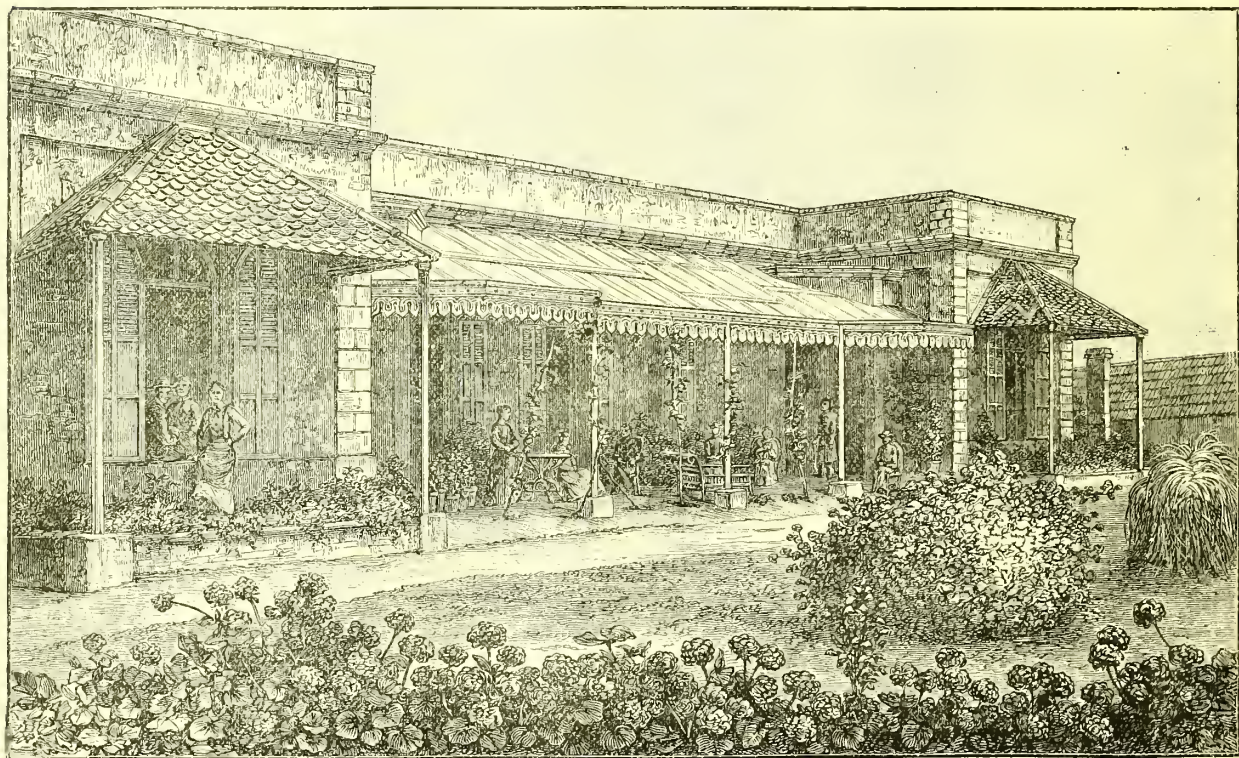
By S. M. BURROUGHS.

YOUR readers are kept so well informed about everything that is going on in the pharmaceutical interest in the colonies, the United States, and, in fact, in all parts of the world except in the most out-of-the-way corners, that it is difficult to find anything of interest to write about which has not already been attended to in a superior manner by some member of your staff. I have thought, however, that it might interest some of your readers to know something about the pharmaceutical side of medical-mission work in North Africa.

One sunny morning in March I took my way through the winding and dirty streets of Tangier, in charge of a guide, to find the missionaries' dispensary. There had been a recent rain, which had pretty well ploughed up the road leading northward from Tangier outside the ancient walls of the city.

those who can afford to pay. The country is naturally one of the healthiest in the world. There are no extremes either of heat or cold. Still, the climate is not depressing in its tendency, like that of the tropical or equatorial regions.

The drugs most largely required are the mercurials and iodide of potassium, as nearly all diseases are complicated by venereal symptoms. It is estimated that more than 90 per cent. of the adult population are contaminated in this way. As a preventive of the worst forms it is not uncommon for the natives up-country to inoculate children with venereal virus. Typhoid and other fevers are very rare, excepting in the towns, where there is an entire absence of sanitary arrangements, and where there is no provision made in the way of taxation for sanitary works. The effects of this I endeavoured to explain in an article to you upon Morocco in the last Winter Issue of THE CHEMIST AND DRUGGIST. It is very fortunate for the Medical Mission that there are no taxes on the importation of medicines in Morocco, although, strange to say, there are taxes on the importation and also on the exportation of everything else. The beautiful garden



The mission-house is situated on a high rocky promontory from which there is a splendid view of the streets, the rock and the town of Gibraltar; also of the Bay of Trafalgar, where the famous battle was fought, and the Spanish town of Tarifa, where the first Customs House was established. The mission hospital and dispensary has been converted to its present use from a former large stable for horses, to which an extra floor has been added. It is as clean and about as well arranged for the purpose as if it had been especially constructed for a hospital. The dispensary occupies a room about 10 feet square, with doors communicating both with the doctors' room and the out-patients' departments. It is well stocked with drugs on shelves on all four sides, which reach from the counters to the ceiling. The drugs are obtained entirely from England, and the reputation of English medicines is of the highest order in Morocco, and, in fact, the same obtains in all Turkish and Mohammedan countries that I have visited. The greatest confidence of the native population is reposed in English quinine in particular, and English drugs and medicines in general. In this hospital and dispensary the poor people are given advice and medicine *gratis*, and money is only taken as a special contribution from

adjoining the dispensary illustrates the marvellous fertility of the soil as well as the favourable climate of Morocco. Walking in the garden with Drs. Churcher and Terry, I was shown some eucalyptus-trees planted about fifteen years ago, which are now about 12 inches in thickness and 30 feet in height. They have so many eucalyptus-trees in the garden and so much unemployed labour that they wish to utilise both for the benefit of the mission. I was asked about the demand for oil of eucalyptus in England. I replied that it must be very large. Then said the doctors, "We would like to employ our people who are willing to work for the good of the mission, but we do not know how to manage to get a still, as in the case of most medical dispensaries there is such an enormous strain upon the resources to supply medicines to the sick poor that no funds remain for any other purpose." I therefore said, "I shall send a letter to THE CHEMIST AND DRUGGIST explaining your need for a still to assist you in making the mission self-supporting by the manufacture of oil of *Eucalyptus Globulus*." This offer was highly appreciated, and if any reader of THE CHEMIST AND DRUGGIST should see his way to present a second-hand still, or even a new one, to the North African Medical Mission it



might be the means of earning for the good cause many times its value. Those experienced in the manufacture of eucalyptus oils, or of essential oils generally, who could send in hints would confer a great favour upon the mission by so doing. It might ultimately become a nucleus for a large production of essential oils, and make the mission self-supporting. In Morocco, as in Algier, the eucalyptus-trees are regarded as a most valuable preventive of malaria, the roots absorbing so much moisture which is evaporated from the leaves; at the same time the exhalations of the essence of eucalyptus impart a decided antiseptic character to the atmosphere. Poultices of the green leaves form an excellent application as a dressing for ulcers and sores. Decoction, tincture, and extract are useful in malaria, also for inhalations in affections of the throat and lungs. Dr. Thomson informed me several years ago in Melbourne that he had observed several cures of pulmonary consumption from the use of oil of *Eucalyptus Globulus* administered either in the form of an emulsion or in a spray. He inoculated a number of rabbits with the germs of pulmonary phthisis. Those which were not specially

cases of malaria, the latter especially in enlarged-spleen cases, which are very numerous. Ipecac. is a favourite treatment for dysentery, in which a peptonised milk diet is also found very useful. Says Dr. Terry:—

"*Ascaris lumbricoides* dwell in the intestines of more than half the inhabitants of Northern Morocco. They are vomited and passed downwards even without medicine. Nothing more heroic than a purge and santolin is needed. But, by-the-bye, don't Moors love purges! And good big ones too. I have given as much as  $\text{mij. ol. croton. and gr. x. calomel}$  to a man in one day, and even then had to remove masses of faecal matter forcibly. Ten grains of calomel is a constant dose when that purgative is used. To a child of eight, 5 grains is by no means a large dose.

"The Moors can stand pain very bravely, but do not like parting with a limb for fear of being thought criminals. We have had several amputation-cases, and probably the number will increase—in fact, at the present moment two are waiting for amputation in the hospital till we have time to attend to them. By-the-bye, the mission hardly allows a sou for



treated rapidly developed the symptoms and died in the course of a week. An equal number in which the disease became fully developed were placed in a chamber where the air was saturated with the oil of *Eucalyptus Globulus* by means of a spray. In each of these cases the disease was checked and the rabbits recovered entirely. In his Consumption Hospital at Hastings Dr. Gambier has put in a heating and ventilating apparatus of the Sturtevant pattern, by means of which the air, after being dried and warmed, can be readily impregnated with the odour of *Eucalyptus Globulus* or other volatile antiseptic and propelled into any part of the hospital.

But to return to Morocco. Diseases of the throat and lungs are very infrequent, and English and Americans who have lived there for years consider that the climate is unequalled anywhere in the world as a health resort, especially for those suffering from throat and lung difficulties.

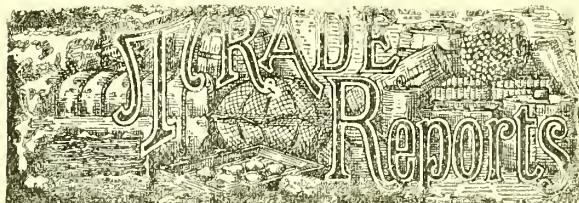
I saw in the dispensary hospital some frightful ulcers and skin eruptions which were healing rapidly under the treatment of white precipitate ointment and the use of the acid nitrate of mercury. Quinine and arsenic are largely used in

instruments, and when the funds barely support the various workers one can hardly press for money for such aids to the work as instruments."

It is hardly necessary for me to suggest that if any instrument manufacturers, physicians, or chemists should have any instruments for which they have no use these would be most highly appreciated by the medical men. Such articles, with any medicines likely to be useful, might be sent to the agents of the mission in this country, at 19, 21, and 29 Linton Road, Barking, London, E., or I would undertake to see that they were delivered carriage free if sent to my care.

Dr. Churcher, whom I met at the mission, has adopted the Mohammedan dress, which is very dignified and becoming to him. It is, moreover, the most comfortable dress that can be worn in a tropical climate, being light and loose fitting. The fashion has been unchanged since the days of Mahomet, and probably since the time of Abraham. The habitations of the Moors in the country are tents of goats' hair in strips of brown and white, and are probably identical with the tents of Scriptural times.





**Notice to Retail Buyers:**—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., October 12.

#### The Perfume-crops in Southern France.

In the South of France the collection of jasmine is nearly finished. It will be one of the heaviest on record. The tuberose-crop, which has been gathered earlier than usual, has only yielded a moderate result. Nevertheless, even the tuberose-output has been greater than the probable consumption, and the price remains low for both articles. The second week of October will witness the beginning of the cassie-manufacture. With regard to this flower, it is a noteworthy fact that the commoner quality, the so-called "*cassie romaine*," is scarcely saleable any more. Perfumers prefer to pay double or treble the price of this kind for other cassie varieties, and the planters are therefore gradually exterminating the flowers of the "Roman" variety.

#### The American Peppermint Oil Crop.

The *Oil, Paint, and Drug Reporter* thinks well of the prospects of peppermint oil from a bull speculator's point of view; our contemporary has reasons for believing that the forthcoming yield will disclose a large reduction as compared with the crops of preceding years. The prolonged cold weather last spring seems to have militated seriously against planting operations, and delayed the season fully a month. Information from the producing districts of Wayne County, especially, is adverse to a large crop of oil, and it is estimated that the yield from that section will fall fully one-third below the crop of 1892, which was looked upon as a light one. It is asserted that no large lots of oil are available in Wayne County, and that until the new goods are ready for market, buyers of round lots cannot be accommodated. In addition to the situation as described, it is reported that the peppermint area has this year been curtailed, and that of thirty-four distilleries which were running in one district of Wayne County five years ago, only seventeen are active now. That the foreign purchases will reach large proportions is to be expected from the gradually increasing volume of the movement in that direction, as shown by the Government export statistics. According to the official figures, the American exports of oil of peppermint were: In 1891, 45,321 lbs.; 1892, 54,987 lbs., and 1893, 99,629 lbs. The exports this year have been remarkably heavy, viz., 55,343 lbs. from January 1 to July 31.

#### The Traffic in Spent Ginger.

In the trade circular of Messrs. J. Travers & Co. attention is again called to the practice of selling exhausted ginger as an adulterant of the pure spice, a practice which appears to be growing rather than otherwise, notwithstanding the attention recently called to it in *THE CHEMIST AND DRUGGIST* and elsewhere. It is said that "with the growth of the aerated-water trade, and with the revulsion of the public taste in favour of the old-fashioned fermented ginger-beer, the quantity of spent ginger produced has very rapidly increased. This refuse material is sold in large quantities to wholesale spice-dealers or grinders, who mix it off with pure ginger in grinding. The fraud is, unfortunately, not readily detected; especially as an admixture of spent ginger, as a rule, greatly

lightens the colour of a ground sample, and makes the partly-worthless substitute look handsomer than the real commodity, when ground from a low grade of genuine ginger." In order, it seems, the easier to cheat their customers, some wholesale firms make it a practice to quote genuine whole ginger at prices from 20s. to 30s. per cwt. below its true market value, knowing very well that their customers only buy the ground article, and simply with the object of deluding them into the belief that the large difference between the whole and the adulterated ground stuff is a sort of guarantee for the purity of the latter, the price-list in its entirety at the same time comparing very favourably with that of more scrupulous dealers. The entirely-exhausted ginger (from which cordials have been prepared), as well as the less worthless refuse of ginger-beer making, is ground up and sold as genuine ginger; partly in this country, and partly, in an unground condition, in America and on the Continent.

**ACID (CARBOLIC).**—Five casks of Grüsser's carbolic acid (95 per cent.) sold cheaply at 1s. 6d. per gallon to-day.

**ALOES.**—*Curacao*: A parcel of 219 boxes and 254 gourds offered to-day sold briskly with good competition at an advance of from 2s. 6d. to 3s. per cwt.; fair to good brown liver, in gourds, 37s. to 48s.; medium brownish, in gourds and boxes, from 21s. to 27s.; ordinary dark to Capey mixed, partly drossy, from 19s. down to 9s. per cwt. *Cape* aloes is considerably dearer, and it is said that shipments from the Cape are likely to be very small for some time. Twenty-nine cases offered to-day were firmly held at 25s. per cwt. for fine bright, while 8 rather ordinary drossy to medium sold at 21s. to 23s. Of *East Indian* aloes very little of any consequence was offered: 17 cases from Bombay, however, realised 41s. to 46s. for medium, and from 26s. to 34s. for ordinary dark quality.

**ARAROA.**—A 23-case parcel from Bahia, which has been offered for sale once or twice before, was again bought in at to-day's auctions.

**ARECA.**—Twelve shillings per cwt. was paid to-day for a small parcel of 11 boxes, showing an advance of 1s. on the last auction rates.

**BALSAM COPAIBA.**—Four cases (each of two 38-lb. tins from *Bahia*), of mixed quality, thin yellow to dark and cloudy, sold to-day at 1s. 5d. per lb.; for another lot of the same parcel a bid of 1s. 4½d. per lb. was rejected. Three casks thin yellow *Maranhão* balsam were bought in at 1s. 8d. per lb.

**BALSAM (TOLU)** is selling in a small way at 1s. 2d. per lb.

**BENZOIN.**—There was a considerable quantity of *Siam* benzoïn on sale to-day, which encountered a very good demand, 25 cases out of 54 offered selling at somewhat irregular prices, the finer grades being rather dearer. Medium to bold almonds in block sold at 17l. 2s. 6d. to 18l.; small pale almonds, partly blocky, at 7l. 10s. to 7l. 12s. 6d.; and ordinary dull hard seedy block, 49s. to 52s. 6d. per cwt. Fine *Sumatra* benzoïn has been very scarce for a long time, and the parcels which were offered to-day were eagerly competed for and brought an advance of 20s. to 30s. per cwt., very fine *Sumatra* seconds bright almondy centres, slightly dark corners selling at 9l. 17s. 6d. to 10l.; good seconds, bright almondy centres, thin red borders, at 8l. 5s.; and fair seconds, rather badly packed, at 5l. 12s. 6d. per cwt. A quantity of *Penang* and *Palembang* gum was bought in.

**BUCHU** firm, with a slightly upward tendency. At auction 14 bales good round green leaves sold readily at 5d. per lb., and one yellowish lot at 4½d. per lb. Two bales long, narrow leaves were bought in to-day at 9d. per lb., and another parcel of 10 bales was withdrawn.

**CALUMBA.**—In large supply at high prices for good qualities, but there is no demand to speak of, and out of some 300 packages shown only 25 rather dark sorts sold at 12s. per cwt.; fine washed yellow is held for 60s.

**CAMPHOR (CRUDE).**—No business is reported in this article in any position; on the spot 150s. per cwt. is asked for fine dry, and 145s. for ordinary commercial *Japan* gum; the i.f. quotation, November–December shipment, being 132s. 6d. per cwt. *China* camphor has sold at 105s. per cwt., c.i.f.,



for November-December shipment, which is several shillings below last week's quotation. At auction to-day 153 cases pinky *China* camphor were shown. They are held for 130s. per cwt., but there were no bids.

**CANELLA ALBA.**—Eight bags good bright to small chips realised 26s. to 27s. per cwt.

**CARAWAY-SEED** keeps quiet at steady prices, good *Dutch* at from 31s. to 35s., and *Russian* at from 23s. to 25s. per cwt.

**CARDAMOMS.**—This drug was in fairly good supply at to-day's auctions, 219 boxes being offered. There was an excellent demand both for home and export trade, and 154 packages sold with good competition at an advance of from 2d. to 4d. per lb. The following prices were paid:—*Ceylon-Mysore*, very fine heavy bold pale, 3s. 9d.; medium and long ditto, 3s. to 3s. 5d.; medium to good palish yellow, 2s. 6d. to 2s. 10d.; small to medium full yellow, 2s. 2d. to 2s. 5d.; long and round mixed yellow, 1s. 10d. to 2s.; good brownish to yellow, partly split, 1s. 6d. to 1s. 9d.; small to medium dull grey, 1s. 3d. to 1s. 5d. per lb. *Ceylon-Malabar*: Medium to bold plump brownish, 2s. to 2s. 3d.; small ditto, 1s. 9d. to 2s.; dark round to long brown, partly split and dull, 1s. 2d. to 1s. 7d. per lb. *Alcepy*, fair size, but rather brownish, 1s. 4d. per lb. *Seeds*, 1s. 4d. to 1s. 5d. per lb. The exports from Ceylon from January 1 to September 18 were:—

Year .. ..	1898	1892	1891	1890
lbs. .. ..	252,254	259,517	210,223	237,496

**CASCARILLA.**—A parcel of 29 bales is held for much higher prices than buyers at present care to pay. For fair bright thin silvery twigs 24s. per cwt. was refused to-day, the owner buying this quality in at 35s. per cwt. For damaged bark 22s. per cwt. was also refused.

**CASSIA FISTULA** is rather scarce. A parcel of 29 bags lean dry pods was bought in at 25s., an offer of 20s. being refused.

**CEVADILLA.**—A consignment of genuine cevadilla seed from Madras, rather mouldy, but otherwise of good quality, was bought in at 2s. 9d. per lb., 2s. 6d. being suggested as the price. There were no bids. This is the first time that this drug has been imported from India. Venezuela is the usual source of supply, and the whole trade has been done from Hamburg hitherto. The drug has been at famine prices for a long time.

**CINCHONA.**—A few lots of South American bark were offered to-day, and mostly bought in; 13 serons fair flat rather thin Calisaya being held at 1s. 4d. to 1s. 5d. per lb. Two cases South American red bark, in small split quill, not very bright, were withdrawn, and of several lots of Java druggists' quill; 12 cases of 140 lbs. each sold without reserve at 8d. per lb., for fine bold brown quill. Four bales *Pitayo*, of 1882 import, very good bright colour, but exceedingly dusty, reached 1½d. per lb. The exports from Ceylon from January 1 to September 18 were:—

Year .. ..	1893	1892	1891	1890
lbs. .. ..	3,013,336	4,885,509	4,047,285	6,529,317

**CIVET.**—None was offered at auction to-day. Fine qualities are scarcely to be had at any price, and for fair commercial quality from 10s. to 11s. per oz. is asked.

**COCULUS INDICUS.**—Slow of sale; 7s. 6d. per cwt. is asked for one parcel.

**COWHAGE.**—Two cases of good quality sold to-day, without reserve, at 1d. per oz. Considering that the drug was practically unsaleable before, this seems to indicate a slight improvement in its position.

**CREAM OF TARTAR** is again rather dearer, and from France the quotation for first white crystals is now 65s. f.o.b. Bordeaux in London the price is 70s. and 72s. for powder.

**CROTON SEED.**—At to-day's auctions 45 bags from Ceylon sold at 20s. to 21s. for fair medium small seeds; from 13s. to 17s.; for apparently damaged dark seeds; and 7s. per cwt. for common quality.

**CUBEBS.**—The report that several parcels have been withdrawn from the market is confirmed. On the other hand, a new arrival of about 50 bags of fair commercial quality has

just been landed and is held for 75s. per cwt. At auction to-day 16 bags were shown, bold brown berries being quoted at 80s. per cwt.

**CUMIN SEED** is very firm, with an advancing tendency. *Malta* seed now costs from 33s. up to 39s. per cwt., according to quality. *Syrian* may be had at from 25s. 6d. to 28s. per cwt.

**CUSCUS GRASS.**—Forty bundles of this drug, of fair bright colour, but somewhat sandy, were bought in at 30s. per cwt. There was no bid at 29s. per cwt.

**DRAGON'S BLOOD.**—Rather neglected, about 13 cases were offered to-day, but all these were bought in; seedy block of fair colour being quoted at 9l., another lot rather better being bought in at 11l.

**ERGOT OF RYE.**—Spanish ergot was in fairly good supply to-day, and 11 cases sold without reserve at an advance of ½d. on the prices realised last auction—namely, 1s. 1½d. to 1s. 2d. for good sound quality. Other parcels were bought in, the general prices named for them being 1s. 4d. per lb. Three packages fair Russian ergot also sold without reserve at the low price of 11d. per lb.

**GAMBOGE.**—A parcel of 47 cases from the United States was not landed in time to be shown at to-day's auctions; 22 other cases were shown, and of these 3 sold at 10l. 17s. 6d. per cwt. for slightly drossy and lumpy gum of fair bright fracture.

**GLYCERINE.**—Very firmly held at somewhat higher prices. Makers of double distilled German 1,260 sp. gr. ask 46s. to 46s. 6d. per cwt., and second-hand holders can only slightly shade those figures.

**GUARANA.**—Five cases were shown to-day: the price is 3s. 3d. per lb., and an offer of 3s. was rejected.

**GUM ACACIA.**—At to-day's auctions a parcel of 8 cases picked Turkey gum sold without reserve at lower prices, 82s. 6d. to 87s. 6d. being realised for small to medium yellowish drop, 72s. 6d. to 77s. 6d. for small ditto, and 60s. for small pale siftings. Twenty-five bales good pale siftings, rather dusty Soudan sorts, are held for 50s. per cwt., which we understand is the price that has been privately realised for similar quality; for 5 bags brown Barbary gum a bid of 45s. is to be submitted, and 3 cases small brown Turkey sorts, partly glassy and rather dusty, sold for 30s. per cwt.

**GUM AMMONIACUM.**—Seven cases of fair quality, partly pale drop, partly blocky, dark and seedy mixed, were bought in at 60s. per cwt.

**GUM EUPHORBII.**—Arrivals are now taking place from Mazagan, and other Moroccan ports. The *Mequinez* brought 49 serons of the drug this week. Some lots were announced for sale to-day, but they were not landed in time.

**GUM KINO.**—Two cases were shown, but neither sold: one which has been sent here from New York and has frequently figured in the auctions was bought in at 18l., the other one, rather brighter in appearance, at 20l.

**GUM MYRRH.**—Of 79 packages offered to-day, 17 are reported sold at the full price of 90s. per cwt. for good pale sorts.

**GUM SANDARAC.**—A parcel of 12 casks sold cheaply, without reserve, at 65s. per cwt., one lot realising 1s. more.

**HONEY.**—All qualities are in fairly good demand, and most parcels offered to-day were disposed of; 18 barrels fair brown liquid *Jamaica* at 35s. to 36s. per cwt.; 42 barrels ordinary candied yellow *San Domingo* at 20s. 6d. to 21s.; and dark brown ditto, at 17s. to 18s. per cwt. Ten kegs *Chilian* honey, very pale candied, brought 41s. 6d.; and for another lot, not quite so pale, 40s. per cwt. was accepted, subject to approval. A parcel of 75 cases fine liquid yellow *Californian* honey was bought in at 50s. per cwt.; and 30 cases *Australian*, partly candied orange, of disagreeable flavour, were bought in at 25s. per cwt.

**IPECACUANHA.**—No alterations of any importance in the position of this drug can be reported. At auction to-day 85 bales *Brazilian* root were shown, and 25 of these sold at a decline of from 2d. to 3d. per lb.; sound root, lean and woody to fairly good annulated, bringing from 4s. 3d. to 5s. (fine root is held for 6s., a bid of 5s. 10d. being rejected); and damaged ditto from 4s. 1d. to 4s. 8d. per lb. *Colombian*



(Cartagena) showed an improvement of about 2*d.* per lb., 3 bales out of 17 which were offered being sold at from 2*s.* 11*d.* to 3*s.* 1*d.* per lb. for damaged root.

JALAP.—No further business is reported this week, and prices remain as last quoted. At to-day's auctions 3 packages of mixed damaged root, partly heavy, partly light, small and wormy, from Vera Cruz, but imported *via* Hamburg, sold at 1*s.* 2*d.* per lb.

KOLA is in moderate supply, with which the demand more than keeps pace. Thirteen packages shown to-day were mostly sold at pretty full prices: good bright West Indian, 8*d.*; mouldy ditto, 6*d.* per lb.; and African, rather dark and partly mouldy (without reserve), 3½*d.* per lb.

LIQUORICE.—A parcel of 28 bales from Bagdad offered to-day was mostly disposed of at 10*s.* 6*d.* to 11*s.* per cwt. for ordinary cut root; very common quality realised only 6*s.* 6*d.* per cwt.

MENTHOL.—The price has advanced with a sudden jerk this week, and to-day the principal owner, who is also almost the only one, asks 13*s.* per lb. for fair quality, although we believe that only 12*s.* 6*d.* per lb. has been paid up to the present. The quotation from Japan "present shipment," is now 12*s.* to 12*s.* 3*d.* per lb., c.i.f. terms.

MUSK.—Although it is reported that a considerable business has been done privately, no evidence of any strong demand was manifested at the auctions, where 13 tins of first pile Tonquin pods were all bought in, an offer of 63*s.* 6*d.* per oz. being refused for small to bold fairly dry pods, thin grey and blue skins, and rather thick underskin; of third pile pods, only 1 tin out of the 8 which were offered sold at 40*s.* per oz. for good, thin, blue skin pods, slightly damp. Empty musk-skins are in abundant supply, and sell very cheaply at present.

OIL (CASTOR).—Eighty cases yellow Calcutta seconds were bought in to-day at 2½*d.* per lb. A bid of 2½*d.* was solicited, but could not be procured.

OILS (ESSENTIAL).—Cinnamon oil is in rather large supply, but only a few cases at to-day's auctions were disposed of at rather lower prices, 1*s.* 1*d.* to 1*s.* 2*d.* per oz. being accepted, "subject to approval of owners." Of *Eucalyptus* oil odd lots continue to be offered in sales, and one case from Melbourne, containing two 38-lb. tins of a deep yellow oil of disagreeable odour, sold at 1*s.* per lb. For 5 cases Western Australian oil of *Sandalwood* (each of 12 1¼-lb. bottles), an offer of 12*s.* per lb. was accepted. *Cassia* oil sold, as usual, to the extent of 10 cases at 3*s.* 2*d.* per lb. A 3-case parcel of *Sassafras* oil from New York is held for 1*s.* 4*d.* per lb., a bid of 1*s.* 3*d.* per lb. being rejected. Of *Italian* essential oils several lots were shown, the bulk consisting of oil of bergamot. The whole of this, however, was bought in at nominal prices. Oil of *Star-anise* was bought in at 5*s.* 9*d.* per lb., Japanese *Peppermint* oil at 7*s.* 6*d.* (a bid of 7*s.* 3*d.* per lb. might be accepted), and oil of *Cajuput* at 2*s.* 9*d.* per bottle. A new parcel of oil of *limes* from Dominica was placed on sale, 5*s.* per lb. being refused for good yellow hand-pressed oil, which was bought in at 10*s.* 6*d.* per lb., and distilled oil, in tins, at 2*s.* per lb. Seven cases "*Peppermint* oil" from Canada, in tins, sold at prices ranging from 5*s.* 3*d.* to 5*s.* 9*d.* per lb. Sales of *Eucalyptus* oil, "*Platypus*" brand, have been made privately this week at 2*s.* 6*d.* per lb. for wholesale quantities.

OPIMUM.—A parcel of 13 boxes opium from Sydney was landed by the *Victoria* this week. The London market is very quiet, and no business of importance is reported this week. Our correspondent writes from Smyrna, under date of September 30:—"During the month of September about 50 cases of manufacturing opium have been taken for America, and prices from 10*s.* 2*d.* to 10*s.* 5*d.* per lb., f.o.b., were gradually run up to 11*s.* 1*d.* for usual run, and 12*s.* 6*d.* to 12*s.* 9*d.* for Yerli. The annual sellers to the Dutch Government have also taken 20 to 30 cases of new selected Karahissar opium at 13*s.* 3*d.*, but they have now ceased buying, as the Government refuses to contract at these high prices. It is therefore probable that our market will decline if no new orders come forward from America. Rain is now required for the autumn sowings, which, in order to be successful, must be carried out by the end of next month, the success or failure of which will influence future prices.

The arrivals of new opium to date amount to 600 cases, against 2,923 at the same time last year."

ORANGE-PEEL.—Rather slow of sale and without improvement in price. Eight bales English cut strips of rather good appearance realised 9*d.* to 9½*d.* per lb., and a few packages of fair thin gelatine from Malta and Tripoli brought 8*d.* per lb.

ORRIS.—Since the beginning of this month the market has considerably improved here, and fine selected Florentine root, which could be bought at 90*s.* per cwt. then, has since been sold at successive advances, closing at 97*s.* 6*d.* per cwt.; at that price sales were made both privately and at auction to-day, when two packages of four cwt. each realised the figure, net terms without any allowances. Another parcel of fine selected Florentine was bought in at 105*s.* per cwt. nominally. For good Verona 80*s.* is mentioned as the price. Mogadore root was fairly well represented, but only a little sold, fair palish at 37*s.* 6*d.* per cwt. There were 27 cases of orris imported from Bombay, showing a quality closely resembling that of the Mogadore root; medium to bold partly very brown and slightly mouldy was bought in at 30*s.* per cwt.

PATCHOULI.—Little demand; 19 bales fair greenish leaves, partly stalky, were all bought in at from 4*d.* to 4½*d.* per lb.

QUASSIA.—There is no demand whatever for this article at present. Someone bid 3*l.* per ton for 10 tons logs of recent import, but the broker refused to submit an offer of less than 4*l.* per ton. Two tons chips were also bought in at 11*l.* 10*s.* per ton.

QUININE.—At the close of last week, when the result of the Amsterdam cinchona-sales had become known, the quinine market began to show a further considerable improvement. About 25,000 oz. German bulk quinine (in second-hands) sold at 9½*d.* to 9¾*d.* per oz.; and after these transactions the agents for the Mannheim works rejected an offer of 9¼*d.* per oz. which was made to them. This week, however, the article has been altogether quiet, and to-day it would be possible to buy at 9¾*d.* per oz. second-hand. It is said that there is a large American order in the market waiting to be executed.

RHUBARB.—At auction to-day 205 cases, mostly recently landed, were offered, a portion of these being declared for sale, without reserve, according to the recently introduced system of selling the root for whatever it will fetch immediately upon landing. Altogether 93 cases sold at a general decline of about 2*d.* per lb., excepting for very fine root, which remains as scarce as ever, and, when offered, brings very high prices. The following were the figures realised to-day:—*Shensi*, medium size, seven-eighths fine bright fracture, round, 2*s.* 6*d.* per lb.; all sizes, flat and round mixed, fair but horny coat, three-fourths pinky, one-fourth dark fracture, 1*s.* 1*d.* to 1*s.* 2*d.* per lb.; medium to bold, damaged and discoloured, partly pink fracture, flat, 10*d.* to 11*d.*; small to medium, round, 10 per lb. *Canton*, round, medium to bold, fair coat, seven-eighths pinky fracture, 1*s.* 2*d.*; small to medium flat ditto, 1*s.* 1½*d.* to 1*s.* 2*d.*; ditto rather bricky and spongy, 1*s.*; round medium to bold fair coat, partly wormy, even grey fracture, 10*d.* to 11½*d.*; flat, wormy, mostly pinky fracture, 10½*d.* to 11*d.* per lb.

SARSAPARILLA.—Very slow of sale for all varieties: Ordinary damaged Lima Jamaica realised from 6*d.* to 9*d.* per lb.; and for fair native 1*s.* per lb. was paid; for a parcel of 15 bales Honduras 1*s.* 4*d.* per lb. is asked; grey Jamaica was also offered, but remained unsold.

SENEGA is reported to be dearer in America, where 1*s.* 8*d.* per lb. is now wanted for good quality, while some firms refuse to sell altogether at the present rates. Two cases shown at the auction to-day of good bright quality were bought in, a bid of 1*s.* 6*d.* per lb. being refused for them.

SENNA.—Of Tinnevely leaves 450 bales were shown, almost the whole of which sold with good competition at an irregular slight advance—bold good green, 6*d.* to 7¾*d.*; medium greenish, partly specky and yellow mixed, at from 3*d.* to 5*d.*; ordinary small yellow and dull to good bright at 1½*d.* to 2¾*d.*; and very common at from ¾*d.* to 1*d.* per lb. Seventeen bales good bright pods also sold at the very low price of ¾*d.* per lb. Of Alexandrian senna a small supply was shown, but no sales were effected.



**STAR-ANISE.**—One parcel of 24 cases genuine but very broken Chinese was bought in at 80s. per cwt., and another lot of 1 case very dark broken seed sold at 60s.

**TONQUIN-BEANS.**—The stock has been much increased by two arrivals (amounting together to 43 cases) of this drug at Liverpool. The consignments came from Pará by the *Lanfranco*. In London the drug is neglected. Several lots shown to-day were bought in, 1s. 3d. being mentioned as the price for rather foxy Pará.

**VANILLA.**—At to-day's auctions only a moderate quantity of about 160 tins was offered, and chiefly sold at steady prices; good to fine bright crystallised at from 8s. to 14s.; medium chocolate, 3½ to 6 inches, at 7s. 3d. to 8s. 9d. per lb.

**WAX (BEES').**—Prices are rather dearer again, and most kinds were in good request at to-day's auctions. Twenty-three packages *Jamaica* sold at 7l. 12s. 6d. to 7l. 15s. per cwt. for good bright, and at 7l. 5s. to 7l. 10s. for rather dark mixed. One case of *Australian* beeswax mixed colours sold at 6l., and of nearly 500 packages *Madagascar* about 160 sold, at 5l. 17s. 6d. to 6l. for fair to good bright, and from 5l. 10s. to 5l. 12s. 6d. for rather dull and grey mixed, partly wormy.

### THE LIVERPOOL MARKET.

**CALABAR BEANS.**—Eight bags sold at 1½d. per lb.

**CHILLIES.**—Further business has been done at 40s. for bright *Sierra Leone*. *Niger* capsicums have been fetching 15s. 6d. per cwt.

**FENNEL-SEED.**—A large quantity of common has been sold ex quay at 17s. 6d.

**GALLS.**—Good blue *Turkey* are held firmly at 60s., some asking much more.

**GUINEA GRAINS.**—Sales at 19s.; holders now ask 20s. per cwt.

**HONEY.**—The market in *Californian* has been cleared of new crop white honey in first hands, and holders now ask 42s. 6d. to 45s. for good white honey. *Chilian* moves slowly at late rates.

**OIL (CASTOR).**—Sluggish at 2½d. to 2¼d. for good second-hand Calcutta, but holders show no disposition to meet buyers.

**QUILLAIA.**—The large quantity of 70 tons offered at auction, but no bids were made. Holders ask 15l. 10s.

**WAX (CARNAUBA)** is very scarce. Grey is held for 52s. 6d.; yellow, 72s. 6d. to 75s.

### THE PRICE OF CHINESE PRODUCE.

THE recent action of the Indian Government, in first fixing 1s. 4d. as the minimum price at which they declared that they would be prepared to sell Indian Government bills, and then immediately afterwards assisting in undoing the effect of their own measure, has made the general bearings of the silver question and its influence upon the prices of commodities at large still more difficult to understand than they were before. Hegel's alleged saying that there was only one man in the world who understood his system of philosophy, and that that one was unable to explain it, may almost be applied to the present state of the Indian-currency problem, with the exception that it would probably be hard to find the even one man who can grasp it. Meanwhile, produce-dealers and others interested in foreign goods have been asking themselves all along what effect the decree of the India Council would have upon the prices of Eastern commodities. This is a point which closely touches the pockets of many of the inquirers, but upon which few have been able to make up their minds satisfactorily.

Under these circumstances, the report prepared by Mr. G. Jamieson, our acting consul at Shanghai, and just issued as an official paper, is particularly welcome. Mr. Jamieson

explains with great lucidity the effect which the fall in silver has had, and is likely to exercise in future, upon the prices of commodities in China, and upon the volume of her exports. China being the country from which we draw some of the most important drugs of commerce, it will be of interest to examine Mr. Jamieson's tables of the average value of some of the leading articles of Chinese trade during the last twenty-three years, and to read his views with regard to their probable future.

In China, according to Mr. Jamieson, an observer is particularly well situated for noticing the changes in the value of precious metals. Though neither gold nor silver is produced in the country to any extent, both may be imported and exported freely. By general consent, silver, not in the form of coins, but in bar shape, is used as a medium of exchange. Gold, if employed for the purpose, would be used in the same way. Moreover, the conditions in China have not been complicated, as they have been elsewhere, by the introduction of steam, machinery, or even, to any considerable extent, by improved facilities of transport, while her foreign trade of about 27,000,000l. imports and 25,000,000l. exports annually is large enough to form a basis for observation.

Mr. Jamieson proceeds to give tables showing the average price in Shanghai of the chief kinds of Chinese export goods for the last twenty-three years. We reproduce the figures relating to four articles belonging to the drug-trade. They mostly show a slight tendency to advance in value. The prices in the table are given in Haekwan taels, the average value of that basis in English currency being indicated in the last column.

Years	Cassia Lignea (per picul)	Nutgalls (per picul)	Camphor (per picul)	Rhubarb. (per ¼-picul)	Sight rate of exchange on London
1870-74	8.02	6.05	6.60	9.11	s. d.
1875	5.09	6.13	5.30	10.70	6 2
1876	5.25	7.21	5.80	10.20	5 11½
1877	5.91	7.15	6.00	9.74	6 6
1878	4.66	7.24	6.06	10.25	5 11½
1879	5.73	7.21	6.51	9.57	5 7½
1880	5.82	9.76	8.17	8.63	5 9½
1881	5.23	10.00	9.90	9.15	5 6½
1882	4.67	8.54	8.22	8.65	5 8½
1883	3.83	9.02	6.70	7.03	5 7½
1884	3.36	9.49	7.86	9.98	5 7
1885	2.85	9.40	9.35	9.98	5 2½
1886	3.13	9.86	11.25	9.85	5 0
1887	4.74	9.93	9.07	9.99	4 10
1888	4.76	9.95	8. 4	9.82	4 8½
1889	4.61	10.04	8.90	8.56	4 8½
1890	5.71	10.05	15.00	9.96	5 2½
1891	5.80	9.33	15.08	9.00	4 11
1892	6.48	11.90	17.30	7.91	4 4

The conclusion at which Mr. Jamieson arrives is that there has lately been a slight tendency to a general rise in the prices of all articles produced in China and exported to gold-using countries, but that this rise will progress much more rapidly in the near future than it has done so far, as a result of the recent action of the Indian Government in fixing the value of the rupee in gold, which will probably have the double effect of still further depreciating silver, and of limiting the silver-using area whence produce can be drawn for the European markets. Whenever silver falls below the normal line of 1s. 4d. for the rupee, Indian produce will be unable to compete on the old terms with that of China. The area of cheaper produce being thus narrowed, it is probable that the price in London will not continue to fall or will not fall so much, and that will necessarily mean enhanced prices in China, and an increased export.

**EFFECT OF THE COAL STRIKE.**—A correspondent writes:—"On Friday I chanced to go to a chemist's to buy a phial. 'I shall have to charge you 1½d., sir, instead of the usual 1d. to-day.' 'Why?' 'Oh, the coal strike.' 'How does that affect medicine-bottles?' 'Why, the bottle-makers are closing their works, and don't know when they will go on again.' A significant illustration," adds our correspondent, "of the ramifying results of the present situation."—*Evening News*.





### Memoranda for Correspondents.

*In letters for publication correspondents are requested to express their views as concisely as possible.*

*Correspondents should write on one side of the paper only, and devote a separate piece of paper to each subject of inquiry.*

*The name and address of the writer should accompany all communications.*

*Let with, if desired, a distinctive nom-de-plume.*

#### Godfrey's Old Bottle.

SIR,—It is clear from Mr. H. O. Huskisson's note that while "the old order changeth," that does not apply to the courtesy so long shown to myself by the father and the son. Mr. Huskisson has sketched one of Godfrey's laboratory-bottles, the shape of which I recognise at once (*C. & D.*, page 551).

Observe the width of the bottle and the shortness of the neck, and then calculate the inconvenience of pouring from a 2-gallon or 4-gallon containing vessel of such a make. When I was Director of the Laboratory at Southampton Street, I had, in many cases, to trust to the formula written with a diamond on the shoulder, as Mr. Huskisson has described. There are sermons in stones; in Godfrey's time there was pharmacy in glass.

The third ingredient in the recipe, about which inquiry is made, is spiritus ammoniæ saturand. The old signs used [1680] were:—

□ Aqua ammoniæ.    □ Sp. ammoniæ.

At a later date the square sign was changed for the triangle reversed:—

▽ Aq. ammoniæ.    ▽ Sp. ammoniæ.

This last preparation was thus made:—

"Pass ammonia through one bottle containing 20 lbs. sp. v. rect.; it will be increased to 23½ lbs. Repeat the operation with a second bottle; it will be increased to 23¾ lbs."

Modern pharmacy has improved since then, but this first distillation was the one used in aqua lavandulæ. Ammonia was employed to develop the odorous principle of the ambergris, and it was similarly used with the same intention in combination with musk.

JOSEPH INCE.

17 Bloomsbury Square, October 6.

SIR,—I believe the mysterious sign to be a monogram for MEL, the little d signifying despumatum. This ingredient, as you are doubtless aware, is frequently found in old formulæ. In Dr. Pereira's formula there is 1 oz. to the pint.

Yours respectfully,    SENEX. (136/31.)

October 6.

*A. D.*, who replies rather contemptuously to Mr. Huskisson's query, has overlooked the circumstance that the "Bery" is not the difficulty. The query refers to the third not the fourth, ingredient.

#### The Major Questions.

SIR,—I enclose working of the second sum. A student who had only been reading for the Major one month did the first without no help.

I don't think the method of working which I give is generally in text-books in common use. In the form I have given it is practically the one employed in Cambridge where the working of similar calculations, *e.g.* a mixed  $H_2SO_4$  and  $HNO_3$ , with a soda solution of known strength is frequently given for the science examinations.

A paper on the subject is given in the "Year-book of

Pharmacy" (1892, page 406) by Mr. D. B. Dott, but he does not show his working method. I do not know of it being previously given to a pharmaceutical man.

I am, yours truly,

PH. C. (136/74.)

P.S.—I have never seen it worked by arithmetic. I do not know if it can be done.

A sample of KBr containing KCl. 2 gram sample required 172 c.c.  $\frac{n}{10}$   $AgNO_3$ . Find amount of KBr and KCl

Let  $x = KBr$   
 $y = KCl$

$$x + y = 2000$$

$$x + y \text{ required } 0.17 \times 17.2 \text{ grams } AgNO_3$$

$$= 2.924 \text{ gram } AgNO_3$$

$$\frac{170x}{1191} + \frac{170y}{745} = 2.924$$

$$1.42737x + 2.23187y = 2.924$$

$$2.23187x + 2.23187y = 2 \times 2.2317$$

$$2.23187x + 2.23187y = 4.46374$$

$$1.42737x + 2.23187y = 2.92400$$

$$0.85450x = 1.63974$$

$$x = \frac{1.63974}{.8545} = 1.9189$$

$$x + y = 20000$$

$$y = 19189$$

$$y = .00811$$

$$As \ 2 : 100 :: .00811$$

$$\frac{.811}{2} = 4.55 \text{ per cent. } KCl. \text{—} 1us.$$

$$\text{Proof } 19189 \text{ KBr requires } 16.103 \text{ c.c. } \frac{n}{10} \text{ } AgNO_3$$

$$.00811 \text{ KCl} = 1.088$$

$$17.191 \text{ c.c. total.}$$

[We have a similar solution of the second question from another correspondent. The method of working is that given in Thorpe's "Chemical Problems." We do not see how the question can be answered arithmetically without an unpardonable amount of guess-work. If Major students are expected to know algebra, it would be advisable to say so—put it definitely, *e.g.*, in the Preliminary examination. There is no difficulty in working the physics question—on paper.]

138/61. *Perplexed* (Edinburgh) in the course of a letter complaining of the faddy tendencies of examiners, says that during the examinations this month a young man was asked to "describe the platinotype photographic process," and was also asked a question regarding "bromide-paper."

#### Lanolin v. Adeps Lanæ.

SIR,—With reference to your note on the above subject in your last issue, page 539, may we ask you to inform your readers that although the injunction against the Wollkaemmerer has been quashed in the Court of second instance, the decision of the Court of Hanover that the mixing of purified wool-fat, even with the addition of a third substance (medicament or fat) with water for medicinal, cosmetic, or industrial purposes must always lead to the preparing of lanolin, has in no way been touched or criticised by the Court of Celle.

We have appealed against the decision of the Celle judgment, as we feel sure that we shall be able to again obtain the complete protection of our rights as has already previously been effected by the decision of the highest German Court—the Reichsgericht, in Leipzig.

Yours truly,

BENNO JAFFÉ & DARMSTAEDTER.

#### Briar Apples.

SIR,—I am sending herewith a specimen or two of more or less botanical interest, and as I can find no one able to afford me information on the same, I should be greatly obliged if, for my own benefit and that of your numerous readers, you would afford any that may be in your power.

What I know of it I append. It is a parasitic growth, and appears in the early autumn on the common briar. In Yorkshire (at least round about Harrogate and Knaresborough) it is quite common, but one or two London students of botany have never seen it before. The cause of my interest



in it is this:—An old farm-labourer, who seems to know every herb one can show him, and the medical properties of most of them, assures me that in any and every case of diarrhoea they rely on these (which he calls "briar apples") absolutely, and use them thus:—They are collected about this time of the year, and left about until dry, when they are transferred to a covered jar to preserve them. When needed, a moderate-sized one is crushed small, placed in a cup, and the cup filled up with boiling water. When cold the infusion (sometimes sweetened and sometimes not) is drunk, and the dose repeated three or four times daily if necessary. A. A. (130/33.)

[These are the pink mossy excrescences from the rose. They are known as "rose bedeguars" or "Robin Redbreast's pincushions." They are occasioned by the puncture of an insect (*Rhodites Rosea*), and are frequent on the dog-rose in the hedges at this time of year. In some parts of the country people believe them to be a cure for whooping-cough if strung and hung round the neck of a child suffering from this troublesome malady.]

#### Landlords and Chemists.

SIR,—Your issue just to hand contains a valuable object-lesson on the justice and expediency of private landlordism. Though the gibbet for hanging male serfs and the pond for drowning female ones at the whim of the landlord are no longer to be found on every estate, and though the community, by the provision of workhouses, has taken the edge off the privilege of the landowners to condemn to death by starvation any man who cannot by payment of rent or otherwise so far placate one of the fraternity as to obtain his gracious permission to live, yet the results of our industry, the security of our homes, our liberties and good names, are still at the mercy of those who have the effrontery to pretend to own the earth.

How long will the industrious public permit itself to be gulled by this preposterous claim? Why should we live on sufferance? We have only our own apathy to thank. The land belongs to the community. The control of it should be in the hands of our representative councils, and the rents should defray our communal expenses and maintain our old age.

Yours faithfully,

HERBERT H. PRESBURY.

Camberwell, S.E., October 6.

#### Chemists and their Livers.

A South Wales correspondent writes:—Are chemists more bilious than other people? For months past I have noticed a certain patent-medicine advertised in the local daily papers which "cures torpid liver of all chemists." Perhaps it is the nature of the occupation which makes the feat greater on their livers than on other people's, or possibly the fault may lie with the "intelligent compositor" who, in a moment of absent-mindedness, omitted the humble comma after liver.

#### A Perfume-critic.

SIR,—I want a form (a "mixture" preferred) for making Jockey Club and heliotrope essences. I have obtained 30 samples of the first and 22 of the second from as many houses as I can think of, but without exception they are crude. The Jockey Clubs are decidedly "greasy" and the heliotropes are common, coarse, and very "vanilly" in odour, especially so if 4 oz. or so are exposed without a stopper an hour or two.

A customer brought a bottle in to be refilled the other day; he had bought it of someone in the city—a chemist—and the odour of heliotrope left in it was delightful.

I had a bottle this week to refill which had been bought at Jewsbury and Brown's. I wrote to them for terms and sample, but they said they made it for themselves, and on no account sold it otherwise than in their own retail; but it was a gem, and far ahead of anything I ever smelled in the way of perfume. I dislike French essences very much, and I cannot but think that Atkinsons, for example, make their perfumes from mixtures.

However it may be, I am under the impression that the perfumes of the better class are suffering with the competition.

Yours obediently,

OL. LAVAND. ANG. (131/23.)

#### MISCELLANEOUS INQUIRIES.

This Editor replies to queries of general interest, in the order in which they are received. Replies are inserted according to the space available. Postal answers cannot be supplied.

Back numbers, containing formulae, educational or other specific information can be obtained from the Publisher.

130/4. W. W.—For the Itching and Loss of Hair in the Cats use a carbolic lotion (1 in 60), to which add 1 in 25 of glycerine of borax. Give an occasional dose of sulphur mixed with butter; no "cat's-meat," but plenty of milk.

127/33. W. T.—We have heard of the preparation being used in excess without bad effect—in fact, it is one of those medicines which must be used in increased and excessive doses the longer a patient uses it.

49/14. Old Copper.—The only thing you can do with your lavender-water is to distil it. If you have not the apparatus for this, perhaps one of your wholesale houses will do it for you.

127/1. A Struggling Chemist.—Curative Syrup similar to a popular preparation is thus made:—

Borax .. ..	gr. xx.
Gentian powder .. ..	gr. xx.
Capsicum .. ..	gr. ij.
Oil of wintergreen .. ..	gtt. xiv.
„ sassafras .. ..	gtt. x.
Conc. decoction of aloes .. ..	3ij.
Taraxacum-juice .. ..	5iv.
S.V.R. .. ..	5ij.
Treacle to make .. ..	5iv.

Mix in the above order, dissolving the oils in the spirit.

131/7. W. H.—For "Dry Soap" see answer to "Delectable" in this week's issue.

133/57. Delectable.—Your sample of "Dry Soap" seems to consist principally of a good mottled soap, scraped and dried, with the addition of a little extra blue colouring. It is made with an animal fatty basis (stearine?), and contains traces of lime. General information concerning the manufacture of soap-powders will be found at page 487, September 23, 1893.

133/64. Inquirer (Cubitt Town).—We do not reply to anonymous inquiries.

130/45. Fig Syrup.—We have not a formula at present, but we shall keep your letter before us.

135/66. Salt is asked by a customer if a solution of chloride of lead made as follows: nitrate of lead  $\frac{1}{2}$  drachm, dissolved in Oj. of boiling water, common salt 2 drachms, in 2 or 3 quarts of water, would be of any use as a disinfectant for flushing closets. We do not think it would be of much use. Nitrate of lead is certainly a stronger bactericide than the sparingly soluble chloride, but neither is a bit more efficacious than, say, calcium chloride or ferrous sulphate—i.e., in the quantities which can be used in water-closets.

133/9. Drcta.—You can easily tell whether a furniture cream contains water or not by noting its specific gravity, or by evaporation.

137/70. Chlorodyne.—What is "Chlorodyne"? You could not do wrong in dispensing Dr. Collis Browne's. We took a vote on the question some years ago, and that was the result of the vote.



123/64. *Alfo*.—There is no Certain Cure for Sun-freckles, but a good "milk of roses," such as was published in the DIARY for 1891, with the addition of about 1 in 2,000 of corrosive sublimate, will be as useful as any of the numerous advertised remedies.

133/9. *Shaving-soap*.—You will find a formula for Crème d'Amandes on page 384, *C. & D.*, June 13, 1892. Churchill publishes a "Short Dictionary of Medical Terms" (2s. 6d.), H. K. Lewis publishes a "Pocket Medical Vocabulary" (3s. 6d.), and Whittaker publishes "Hoblyn's Terms Used in Medicine and Collateral Sciences" (10s. 6d.).

129/6. *Capilla*.—There is nothing to prevent your attempting To Remove Superfluous Hair by Means of Electrolysis with your practical knowledge of galvanic batteries and electrical appliances for medicinal purposes. A small book on the subject has been published lately by Dr. Balmanno Squire. It can be had from Messrs. Churchill. You will require, to start with, three or four Bunsen cells (quart size), a few yards of fine copper wire, covered with silk or gutta-percha, and a pair of very fine electrolysis-needles. If you have an opportunity of seeing electrolysis performed for the removal of naevi, in some general hospital, you will learn more in a few minutes than it is possible to impart in these columns.

130/16. *Fienugreek*.—The Neuralgia Pill:—

Quin. sulph.	..	..	..	..	gr. i.
Ferri sulph. ex.	..	..	..	..	gr. ss.
Lupulin.	..	..	..	..	gr. i.
Ext. hyoscyam.	..	..	..	..	gr. i.
Ext. colchici	..	..	..	..	gr. 1/4
Gelsemium	..	..	..	..	gr. 1/4

M. Ft. pil.

seems a good one, but if it does not answer your purpose use butyl chlorat. gr. iij. with hydrochlorate of gelsemium  $\frac{1}{500}$  gr. as recommended in the "Extra Pharmacopœia." Ground Oyster Shells.—We do not think they are in the market. If you wish to grind them, put the shells in a clear fire until thoroughly calcined, then powder; but if a poultry food be required, why not use cuttle fish-bone, roughly ground?

130/72. *Tonic* wishes to know if this Quinine and-Iron Tonic will keep indefinitely?—

Ferri et quin. cit.	..	..	..	..	3ss.
Spt. vin. rect.	..	..	..	..	5ij.
Glycerini	..	..	..	..	3iv.
Aq. chlorof. ad	..	..	..	..	3iij.

M.

Sig.: 3ss. ter in die sumend.

The mixture is a good one, and will keep a reasonable time but not indefinitely.

121/54. *J. W. W.*.—Toilet-soaps.—It is possible for you to manufacture them to sell at 3d. per tablet, but do you really think it is worth the trouble, in view of the competition amongst manufacturers and dealers? You can buy toilet-soaps in any shape and size, with your name stamped upon each at a cheap rate. You will find several books named on the subject in the 1892 DIARY, page 330.

130/19. *Indelibilis*.—Many methods for the Removal of Tattoo-marks have been published from time to time in this journal, but we have never met with one that answers in every case. There is a fortune waiting for someone if it were only known how to do it.

128/4. *Young Chemist* will find a good deal of information concerning the Glazing of Earthenware in "Watts's Dictionary of Chemistry," under Clay, Porcelain, Glass, and Silicates. It is impossible for us to advise unless we know what method of enamelling was adopted. "Fownes' Chemis-

try," Inorganic, edited by Watts, also gives very useful hints concerning the enamelling of earthenware goods.

122/48. *Dunno*.—You will find the prescription containing Jerubebin and Helenias Dioica quoted fully, on the authority of the late Professor Maisch, at page 4, January 7, 1893. See also page 737, May 27, 1893, for further information concerning "Jerubebin." If you refer to the "Correspondence column" a few years back you will find another reference.

129/12. *Febrifuge*.—Your powder which is taken For Colds, Influenza, &c., contains nitrate of potash, a very minute quantity of tartar emetic, coloured with the addition of a few drops of cochineal solution.

132/17. *Regent*.—Your Calcium Chloride in the form of an oily-looking solution, must have been the deliquescent crystals. You had better evaporate some of it, to get an approximate idea of the strength represented as anhydrous calcium chloride. It has been recommended as useful in wasting-diseases, also for chorea, uterine fibroids, and scrofula. For dose, &c., see "Squire." The chloride was at one time much prescribed by Sir J. Y. Simpson, of Edinburgh, and a syrup, containing 10 grains in each drachm, was the common form for administration. Calcium chloride is a waste product in alkali-manufacture.

126/45. *Marrubium*.—Your Ointment for Eczema seems to consist mostly of oil of bays, with the addition of a proportion of sapo mollis, B.P.

43 21. *Grasses*.—The grass is *Panicum sanguinale*, Scop., a cornfield casual.

128/56. *D. G. M. G.*.—For instructions and necessary formulae in connection with the Pearl-coating of Pills, see "The Art of Dispensing," published at this office, price 3s. 6d.

129/90. *W. B. B.*.—Your sample of Children's Friend is a modified Godfrey's Cordial containing magnes. carb. levis. Several formulae have been published during the past few weeks for similar preparations.

127 3. *Medicus*.—Cod-liver Oil and Malt-extract Solution.—See page 378, September 2, 1893.

131/24. *Apprentice Bill*.—To colour Syr. Hypophosph. Co. a nice green, you may try a very minute quantity of aniline dye.

131/12. *Subscriber*.—The sample of Diarrhœa and Cholera Mixture is mist. cretæ, B.P., with the addition of about 15 grs. pulv. cretæ aromat. c. opio, B.P.

#### INFORMATION SUPPLIED.

CAPUTINE is made by Mr. Henry Bell, chemist, Waterford.

#### INFORMATION WANTED.

127/21. *Alpha* wishes information concerning "Arden's Tincture," which he believes to be an aromatic tincture of rhubarb.

132/30. Who supplies Dutch Drops' wrappers?

134/34. Who makes night lights, each light in tin box with wicks supported by small spiral?

138/12. Makers of farina suitable for blanc-mange.

137/61. What is the composition of Flemish paste, used instead of black lead?



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*See Advertisement, page 52 (bottom folio), July 1, 1893.*

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Manufacturers of Granular Effervescent Preparations. We shall be glad to give specially favourable quotations, and to send samples of our superior Nos. 1, 2, and 3 qualities of **CITRATE OF MAGNESIA.**

Importers of Cod Liver, Castor, and Olive Oils; Extra Super Essence of Lemon and Bergamot, Otto de Rose, and all



Essential Oils; Valentinia Saffron; Vanillas; Fruit Essences; Carmine, Aniline Dyes; Bees' Wax, &c., &c.

MANUFACTURERS of Very Superior Flexible Gelatine Capsules of Balsam Copaiba, Cascara Sagrada, Castor Oil, Cod-liver Oil, Santal Oil, &c. Samples and Lowest Quotations per 1,000, or in Boxes for Retail, will be sent on application from either the Wholesale or Retail Trade.





# BICARBONATE OF SODA,

REFINED AND RECRYSTALLIZED.

PURE AND CHEAP.

## ANALYSIS.

Bicarbonate of Soda	...	...	...	...	...	97.20
Mono Carbonate of Soda	...	...	...	...	...	1.90
Sulphate of Soda	—	...	...	...	...	trace
Chloride of Sodium	—	...	...	...	...	.035
Moisture	—	—	...	...	—	.82
Insoluble	...	...	...	...	—	nil

# PURE ALKALI,

GUARANTEED 58 DEGREES.

EQUAL TO 98 PER CENT. OF CARBONATE OF SODA.

Most economical form of Soda for the use of Printers  
Bleachers, Dyers; Glass, Paper, and Soap Makers.

## CONCENTRATED CRYSTAL SODA (Sesqui-Carbonate).

By far the Purest and Cheapest form of WASHING SODA.

Only 1 lb. of Concentrated Crystal Soda required to do the work of 2 lbs. of Washing Soda.

# SODA CRYSTALS

OF THE FINEST QUALITY.

Also BLEACHING POWDER.

## BRUNNER, MOND & CO., LIM.

*Manufacturers of Soda by the Ammonia Process,*

**NORTHWICH, CHESHIRE.**



# Dr. J. COLLIS BROWNE'S CHLORODYNE.

THE ORIGINAL AND ONLY GENUINE.

## IMPORTANT CAUTIONS.

From Lord Chancellor SELBORNE, Vice-Chancellor Sir W. PAGE WOOD,  
and the LORDS JUSTICES OF APPEAL.

VICE-CHANCELLOR SIR W. PAGE WOOD, by whom the suit in Chancery was first heard, stated in his judgment that "Dr. J. Collis Browne was undoubtedly the Inventor of Chlorodyne, that the whole story of the Defendant Freeman was as deliberately untrue as the falsehood he had deposed to with reference to the use of his Chlorodyne in the Hospital."

The VICE-CHANCELLOR also stated, "that Chlorodyne was a fanciful name, and had application been made sooner, the Court would have given Dr. Browne protection."

LORD CHANCELLOR SELBORNE coincided with the judgment of the Vice-Chancellor upon this point, and stated, "that had application been made at a proper time and place, the Court would have found means to restrain the Defendant from misrepresenting the decision of the Vice-Chancellor."

LORD JUSTICE JAMES, on appeal, stated in his judgment, "that the Defendant Freeman had made a deliberate misrepresentation of the decision of Vice-Chancellor Wood."

It was proved in Court, on affidavit by Mrs. Forbes, of Paris, that the testimonial published in the *Times*, November 14th, 1865, speaking of the great efficacy of Chlorodyne in Cholera, referred to Dr. J. Collis Browne's Chlorodyne, and that she never used any other, that she had written to the Defendant Freeman to that effect; notwithstanding which notice the Defendant publishes the said testimonial as referring to his medicine.

The Editor of the *Medical Times*, in his report on Chlorodyne, January 13th, 1866, gives information that the Chlorodyne referred to was the medicine introduced by a retired Army Medical Officer, which was Dr. J. Collis Browne; still this is published by the Defendant as testimony to his medicine.

Numerous affidavits from eminent Physicians and others were produced in Court, stating that Dr. J. Collis Browne was the inventor of Chlorodyne, and that when prescribing they mean no other.

The Defendant himself publishes that his compound is in effect and composition quite different to any other preparation; nevertheless he assumes the name, testimonials, &c., of Chlorodyne.

Technicalities in law prevent that protection which the public should justly have against such a course of conduct. It is now incumbent on all who purchase Chlorodyne to see that the name, Dr. J. Collis Browne's Chlorodyne, is engraved on the Government Stamp, as it is not sold otherwise. All other compounds under the name of Chlorodyne are spurious. All attempts at analysis have failed; hence the statement that the constituents of Chlorodyne are known is a misrepresentation.

ORIGINAL AND



## FURTHER IMPORTANT NOTICE.

The subjoined list of eminent Firms concur with Vice-Chancellor Sir W. Page Wood's statement in Court, that Dr. Collis Browne was undoubtedly the Inventor of Chlorodyne; and that when Chlorodyne, or the Original Chlorodyne, is ordered, they invariably supply Dr. J. Collis Browne's:—

Apothecaries' Hall,	London	Frazer & Green,	Glasgow	Morson, T., & Son,	London
Allen, Hanbury & Co.,	"	Gale & Co.,	London	Newbery & Sons,	"
Baiss Brothers,	"	Giles & Son,	Clifton	Oldham, G. & Co.,	Dublin
Banks & Richards,	Birmingham	Goulding, Messrs.,	Cork	Parsons & Richardson,	Leicester
Barron, Harvey & Co.,	London	Gratton & Co.,	Belfast	Peake, Allen, & Co.,	Dublin
Bell, John, & Co.,	"	Grimwade, Ridley,	London	Raines & Co.,	York
Bourne & Taylor,	"	Grindley & Son,	Chester	Raines & Co.,	Edinburgh
Corbyn & Co.,	"	Hearon, Squire & Francis,	London	Sang & Barker,	"
Cox & Gould,	"	Hodgkinson, Tonge & Stead,	"	Sanger, J., & Sons,	London
Curling & Co.,	"	Hopkins & Williams,	"	Sim, James, & Co.,	Aberdeen
Curtis & Co.,	"	Hovenden, R., & Sons,	"	Smeeton, W.,	Leeds
Davy, M'Murdo & Co.,	"	Hunt & Co.,	Exeter	Southall & Co.,	Birmingham
Dobbin, W., & Co., Limited,	Belfast	Hunt, A., & Co.,	"	Sutton, W., & Co.,	London
Drew, Barron & Co.,	London	Johnson, J. H. & S.,	Liverpool	Tomlinson, Hayward & Co.,	Lincoln
Drew, B., & Alexander,	"	Langton, W., & Co.,	London	Treacher, Hodgkinson & Co.,	London
Dunn & Company,	"	Lynch & Co.,	"	Westrup, J. B.,	Kensington
Edwards, W.,	"	Mander, Weaver,	Wolverhampton	Westwood & Hopkins,	London
Evans, Gadd & Co.,	Exeter	Marsden & Sons,	London	Woolley, James,	Manchester
Evans, Leecher & Webb,	London	Maw & Son,	"	Wyley & Brown,	Coventry
Ferris & Co.,	Bristol	Meggison & Co.,	"	Yates & Co.,	London
Foulger, S., & Son	London	Mackay, John, & Co.,	Edinburgh		

After these public statements in a Court of Equity, and subsequent confirmation by the Trade at large, no Chemist can conscientiously use or sell any other compound for Chlorodyne without committing a breach of faith, unjust to patient and physician. The value of the remedy alone creates the great demand.

Sold in Bottles—1s. 1½d., 2s. 9d., 4s. 6d., and 11s. Usual Discount to the Profession.

SOLE MANUFACTURER,

**J. T. DAVENPORT, Pharmacist,**  
33 GREAT RUSSELL STREET, BLOOMSBURY SQUARE, LONDON.



“Out with it boldly:  
truth loves open dealing.”

*King Henry VIII.*

“**LEICESTER** may be regarded as the Headquarters of the Pill Industry in England.”—*Chemist and Druggist*, January 30, 1892.

“The manufacture of these Pills on a grand scale has been reserved for **LEICESTER**, where it has been cultivated for over twenty years.”—*Manufacturing Chemist*, April 22, 1893.

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“**MR. LLOYD** was for eighteen years a partner in the firm of **JOHN RICHARDSON & CO.**, when he personally introduced the Pearl Coated Pills to **LEICESTER**; and as he had during all this time practical experience of pill-making, he may be said to have been at it for twenty years.”—*Manufacturing Chemist*, April 22, 1893.

The *Lancet*, April 9, 1892:—“The coating gradually disintegrates in flakes even when placed in cold water.”

The *British Medical Journal*, February 13, 1892:—“The Pearl Coated Pills prepared by Messrs. T. Howard Lloyd & Co. possess a very elegant and finished appearance.”

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Wholesale Druggists and Manufacturing Chemists,

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*Wholesale and Export Druggists,*

**EDINBURGH.**

# CHLOROFORM

(DUNCAN'S).

PREPARED FROM PURE AND METHYLATED SPIRIT.

Also CHLOROFORM (BLUE LABEL).

Put up in all sizes of bottles. A strap with Name and Trade Mark of the Firm is placed over the stopper of each bottle. For Export, in stoppered bottles, securely luted, and in hermetically sealed flasks when required.

*N.B.—We guarantee all the above CHLOROFORMS to be PURE CHLOROFORM, answering all the tests of the British Pharmacopœia.*

## FOTHERGILL'S MADONAL, OR HEALTH AND LIVER DROPS.

For the Prevention and Cure of Diseases arising from Irregular Action of the Liver, Bowels, Kidneys, and the whole of the Alimentary Tract. In bottles at 2/6 and 4/6 each.

## MUNK'S COD-LACTONE.

Emulsified Cod Liver Oil with Lactophosphate of Lime. In bottles at 2/6 each.

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# BARRON, HARVEYS & CO.

GILTSPUR STREET, LONDON, E.C.

Beg to inform their friends and the Trade generally that, having purchased the Business of

**BARRON, SQUIRE & CO., BUSH LANE,**

and also the various Formulæ of the Special Preparations of

**JAMES BASS & SONS, HATTON GARDEN,**

they are prepared to execute orders for the same, and pledge themselves to supply them in all their integrity.

*Specimens of these Preparations have remained in the Museum of Kew Gardens during 28 years without deterioration.*



# AN ERRONEOUS IMPRESSION

seems to have been formed by  
some, that because our business  
has assumed such considerable  
proportions as indicated in our  
recent publication, entitled  
"A Century of Enterprise,"  
we are disposed to ignore  
anything but large orders,  
and to treat with contempt  
and carelessness the modest  
requirements of the Retailer.

## THERE NEVER WAS A GREATER MISTAKE

and although the opinion is very  
carefully fostered and promulgated  
by interested persons in various  
quarters, it has not the slightest  
foundation in fact. We are well  
aware of the value of the old  
Scotch adage, that "Mony a  
mickle makes a muckle," and  
every order entrusted to us  
receives the most careful  
attention, irrespective of size.

## DON'T HESITATE TO WRITE. WE ARE AT YOUR SERVICE.

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### JOHN RICHARDSON & CO., LEICESTER, LIMITED

ESTABLISHED 1793.

INCORPORATED 1891.

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# 'ZULON'

A Certain Cure for Mange, Eczema, Ringworm, and all Skin Diseases in Dogs, Horses, and other Animals.

Price per bottle, 1/9 & 2/6. Wholesale, 22/6 & 16/- a dozen.  
Carriage Paid on half a dozen.

SOLE PROPRIETOR—

**JOHN P. WOOD,**  
WARWICK ROAD, EALING, LONDON.



## HARROLINE PILLS.

The Great Harrogate Tonic.

An unfailing Cure for Poverty of Blood, Anæmia, Chlorosis, and every form of Debility arising therefrom.

1s. 1½d. and 2s. 9d.

WHOLESALE FROM THE

**HARROLINE PILL CO.,**  
HARROGATE.

FULL PARTICULARS & TERMS ON APPLICATION.



CLARKE'S BLOOD MIXTURE is ENTIRELY FREE from any POISON or metallic impregnation, does not contain ANY INJURIOUS INGREDIENT, and is a good, safe, and useful medicine."

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Counter Bills and Posters, with Name and Address, also Show Cards, on application. Printed matter supplied in any Language for Foreign Agents.

CAUTION.—Immediate proceedings will be taken against all persons pirating the Trade Mark, "Blood Mixture" (Registered No. 3,275), Labels, Wrappers, Bills, or Advertisements, or in any way infringing the rights of the Sole Proprietors,

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# BEECHAM'S TOOTH PASTE.

All Chemists, Druggists, and Stores should Stock this new article, which is being well advertised, and, as it is a really good speciality, will shortly be in great demand. It is put up in collapsible tubes, retail price 1/-, and can be obtained from any Wholesale House.

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The most saleable Patent Medicine in the market.

In Boxes 9½d., 1s. 1½d., and 2s. 9d. each.

HOME RETAILERS desirous of exhibiting Iron Tablets, Showcards, or Dummies, and wishful to have a good supply of Handbills, Beecham's Oracles, Music, &c., are requested to notify their requirements to the Proprietor,

**THOMAS BEECHAM, St. Helens, LANCASHIRE.**



# THOMAS TYRER & CO.

STIRLING CHEMICAL WORKS. ESTABLISHED 1844.

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GUARANTEE ALL THEIR PREPARATIONS FOR  
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AND ALL OTHER SCALES.

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Absolutely pure. The original preparation, invented and introduced to medicine by Mr. Schacht in 1855. Its distinct superiority is universally admitted. In  $\frac{1}{2}$  lb., 1 lb., 2 lb., and 5 lb. bottles. Dose : 1 drachm diluted. When ordering, please to specify "SCHACHT'S."

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Contains pure Bismuth and *Pepsina Liquida* in combination with sedatives. A formula most serviceable in the treatment of gastric pain. In 4 oz.,  $\frac{1}{2}$  lb., and 1 lb. bottles.

### SCHACHT'S SYR. CINCHONÆ ALCOHOLICUS.

A standard preparation, of definite alkaloidal strength, containing the entire medicinal properties of the finest Cinchona Bark. It is, in fact, *Bark minus the woody fibre*, and its efficiency has been proved by careful medical inquiry. Dose : Ten to sixty drops.

### SCHACHT'S PEPSINA LIQUIDA (REGISTERED TITLE).

Fluid Pepsine of extraordinary activity—tasteless, odourless, attractive to patients, and reasonable in price. Every teaspoonful when tested by the official B.P. process is *guaranteed* to effect the solution of 1,000 grains of albumen. Peptic power is the only test of value. Most of the foetid and repulsive, dry Pepsines have proved worthless. In 4 oz. bottles, 2s. 6d. each; and larger sizes, for dispensing, at a cheaper rate.

### SCHACHT'S PEPSINA LIQUIDA C. BISMUTHO.

Each drachm contains in a concentrated form, besides the fluid Pepsine a full dose of Schacht's Liquor Bismuthi. Dose : One drachm. In  $\frac{1}{2}$  lb. and 1 lb. bottles.

*N.B.—Peps. Liq. c. Bismutho Co. contains, in addition, one grain soluble Euonymin in each drachm.*

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Each drachm contains one grain of soluble Euonymin. Dose One drachm. For dispensing,  $\frac{1}{2}$  lb. and 1 lb. bottles.

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A perfect solution of Podophyllin, containing  $\frac{1}{4}$  grain in each drachm.

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A pleasant and active form of *Cascara Sagrada*. Dose : One to three teaspoonfuls diluted. In 4 oz.,  $\frac{1}{2}$  lb., and 1 lb. bottles.

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An entirely new Essence, perfectly reliable, for the coagulation of Milk and the production of Junkets and Curds and Whey. It is a preparation of the most wholesome nature, that *contains no salt*, and has no special taste, smell, or colour. In large bottles at 1s. of any Chemists. This Essence keeps well in any climate.

*The above Preparations can be procured from Messrs. Barclay & Sons, W. Edwards & Son, and the Wholesale Druggists; or direct by post from*

## GILES, SCHACHT & CO., Clifton, Bristol.



# MRS. WINSLOW'S SOOTHING SYRUP

## FOR CHILDREN TEETHING.

Greatly facilitates the process of Teething, by softening the Gums, reducing all Inflammation; will allay ALL PAIN and spasmodic action, and is

**SURE TO REGULATE THE BOWELS.**

Depend upon it, Mothers, it will give rest to yourselves and

## RELIEF & HEALTH TO YOUR INFANTS.

### Mrs. WINSLOW'S SOOTHING SYRUP

Has been used for over Fifty Years by millions of Mothers for their children while Teething with perfect success. It soothes the child, softens the gums, allays all pain, cures wind colic, and is the best remedy for diarrhoea

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**CURE COUGH, COLD, HOARSENESS, AND INFLUENZA. CURE ANY IRRITATION OR SORENESS OF THE THROAT.**

**RELIEVE THE HACKING COUGH IN CONSUMPTION. RELIEVE BRONCHITIS, ASTHMA, AND CATARRH.**

**CLEAR AND GIVE STRENGTH TO THE VOICE OF SINGERS, AND ARE INDISPENSABLE TO PUBLIC SPEAKERS.**

**SOOTHING AND SIMPLE, CHILDREN CAN USE THEM, AS THEY ASSIST EXPECTORATION AND RELIEVE HOARSENESS.**

**NOTICE.**—Brown's Bronchial Troches are guaranteed to contain no Opium or other Poison.

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**Prevents the Hair from Falling Off. Restores Grey or White Hair to its ORIGINAL COLOUR.**  
Being delicately perfumed, it leaves no unpleasant odour.

**IS NOT a Dye, and therefore does not stain the skin, or even white linen.**

Should be in every house where a **HAIR RENEWER** is needed.

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London International and Universal Exhibition, 1884, Gold Medal Awarded for our Pharmaceutical Preparations.  
Calcutta Exhibition, First-class Certificate and Two Prize Medals Awarded for our Pharmaceutical Preparations.

# HEWLETT'S MIST. PEPSINÆ CO. C. BISMUTHO.

Highly recommended in various forms of dyspepsia, having a direct action upon the mucous membrane of the stomach and intestines as a sedative. It can be administered with marked and almost instantaneous effect in the irritative form of dyspepsia, more especially when *pyrosis* is a conspicuous symptom, and pain occurs an hour or more after food. In simple neuralgic gastric pain following eating, occurring in feeble subjects, it is especially indicated, and even in *carcinoma* it has been used with great success in alleviating pain and vomiting.

In the dyspepsia of patients dependent upon some organic disease, and where there is a decided loss of nerve power, it is of singular service. Thus, for instance, a person after a meal complains of a peculiar gnawing and emptiness, with slight pain at the epigastrium, evident signs of general relaxation and loss of nerve power, clinical experience has shown that it is of great service as a tonic and stomachic. A portion of its value arises, it may be, from its action upon the spinal motor nerve centres. Be these things as they may, experience has abundantly demonstrated the value of the compound as a stomachic, anti-dyspeptic, and tonic, in general functional atony and relaxation, and in the various forms of dyspepsia, constipation, or diarrhoea, connected with atony of the visceral muscular coat, the Mist. Pepsinæ Co. c. Bismutho is a very valuable remedy. In the *exhausting purging of Phthisis*, accompanied with night sweats and restlessness, Dr. MATHEWS, of Nantwich, has used it with marked and appreciable effect.

Price (in England) 10s. 6d. per pound.

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"This combination of Messrs. HEWLETT'S is one which has been extensively tested, and with good results. It is justly popular in the profession as a very valuable and effective combination. It serves not only to improve *anæmia*, but to lessen the gastric pain and to facilitate difficult and painful digestion, without setting up any evils of its own. It is a very good crutch for persons of weak stomach to lean on."—January 15th, 1881.

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Retail	Per doz.	Retail	Per doz.	Retail	Per doz.	Retail	Per doz.
4/6..Aleool de Menthe Rieqlas	41/6	4/6..Capsules Matico	35/	2/3..Guyot's Liq. Gondron	18/	2/9..Rabuteau's Dragées Ferrug.	24/6
2/9.. Ditto ditto	21/	4/6.. " Mathey Caylus	35/	9/..Laville's Goat Tincture	81/	7/.. " Elixir Ferrug.	65/
2/9..Aubergier's Syrup	27/	4/6..Chassaing's Wine	39/	9/.. " Pills	78/	2/9.. " Syrup Ferrug.	24/6
1/9.. " Pâté	15/	2/9.. " Pills	24/	1/11/2 Papier Fayard	6/9	4/..Racahout des Arabes	31/
6/6..Bay Rum	57/	4/6..Clin's Dragées Bromide Cam.	45/	2/3.. Ditto	13/6	4/6..Reynal's Bougies	38/
3/6.. Ditto	31/	5/..Eau de Botot (Genuine)	40/	2/3..Papier Frumau	14/6	2/9..Record's Injection	24/
2/..Belloc's Charcoal	15/	3/.. Ditto	24/	4/.. Ditto	24/6	4/6.. " Capsules	36/
1/9.. " Lozenges	15/	2/..Espie's Cigarettes	13/6	1/9..Pâté d'Aubergier	15/	9/.. " Syrup	90/; 4/6, 42/
4/6..Blancard's Pills	32/	4/6..Elixir de Coca (Mariani)	48/	1/9.. " de Berthé	15/6	1/6..Star Paper	11/
2/6.. Ditto	18/	2/9..Flon's Syrup	23/	2/9.. " de Coca Mariani	25/	1/9..Vallet's Pills	14/6
4/6..Brou's Injection	27/	..Gayetty's Paper		1/9.. " de George	14/6	2/9.. Ditto	23/
4/6..Bugeaud's Wine	36/	2/3..Granules Arsen. Acid	13/6	1/11/2 " Ditto	9/	4/6..Veloutine (White, Pnk, Oim.)	22/
3/6..Bully's Vinegar	30/	2/9.. " Iron	14/5	1/6.. " de Nafe	13/6	3/6.. Ditto ditto	22/
2/.. Ditto	14/6	2/9.. " Soda	15/4	1/9.. " Reguand	14/6	2/9..Vichot's Trochisques	22/
4/6..Candé's (Lait Antiphilq.)	36/	2/9..Grimault's Syrup Lime	24/	7/..Pierlot's Valerian	60/	4/6..Vin Mariani	36/
4/6..Capsules Bromide Camph.	45/						

SOLE EUROPEAN AGENTS FOR BATTLE & CO.'S BROMIDIA AND IODIA, AND BLOUNT'S OIL OF TAR AND TEREMORRHU.

M.M. Roberts & Co. ont l'honneur d'informer M.M. les Pharmaciens Spécialistes de France et de l'Etranger qu'ils se mettent à leur disposition pour des dépôts qu'ils voudraient établir à Londres. On peut avoir tous renseignements en s'adressant à leur maison de Londres ou à Paris.

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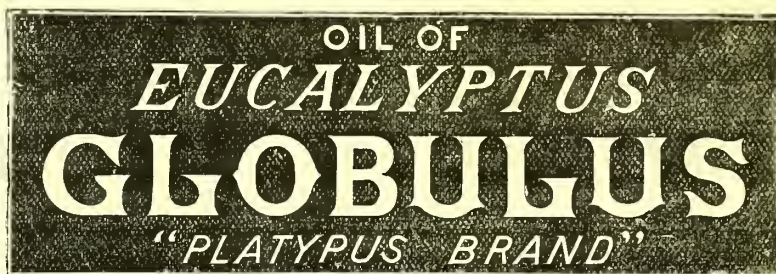
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House in Paris: ROBERTS & CO., Rue de la Paix 5.

[1823

47





HELBING'S ANALYSIS.—Specific Gravity, 0.9160 at 15° C. Contains 41.4 per cent. Crystallisable Eucalyptol.  
Free from Phellandrene, and from irritating constituents.

IN TASTE, AROMA, AND THERAPEUTIC VALUE

**THE FINEST OIL KNOWN.**

**OIL OF EUCALYPTUS "RISDONIA"**

A BEAUTIFULLY SCENTED OIL.

30-lb. TINS. CASES OF 2 and 4 TINS. (Contracts at Special Prices.)

TO BE OBTAINED OF ALL WHOLESALE DRUGGISTS.

APPLY FOR SAMPLES TO THE

**TASMANIAN EUCALYPTUS OIL CO.,**

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**BOORD & SON,**

DISTILLERS, FOREIGN WINE AND SPIRIT MERCHANTS, AND METHYLATORS,  
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Quotations for **S.V.R. Methylated Spirit** and *Finish on application.*

**FINEST ORANGE WINE FOR QUININE**

**JAMES  
BURROUGH,**

**FINE PORT** (without tannin)  
**FINE SHERRY** (for Medicinal uses, &c.)  
**FINE MALAGA** (for Steel Wine, &c.)  
**FINE BURGUNDY** (for invalids)

**S.V.R. and Methylated Spirit at lowest present prices.**

**CALE ST. DISTILLERY**

*All at Lowest Prices and  
specially recommended.*

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**S. V. METH.**

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COPPERFIELD ROAD,  
LONDON, E.

**LARGEST MAKERS IN THE KINGDOM.**

We are prepared to supply **METHYLATED SPIRIT** in  
5-gallon quantities at **Lowest Prices.**

**REDUCTIONS TO LARGE BUYERS.**

**SAMPLES FREE.**





A combination of Camphor, Eucalyptus, and Coal Tar. A Powerful Disinfectant, Deodorizer, Insect Destroyer, and Air Purifier.

# CAMPHORTAR

THE CHEAPEST DISINFECTANT BEFORE THE PUBLIC.

It is most elegantly and attractively packed in the form of Maltese Crosses wrapped in Gelatine, and commands a ready sale. Camphortar fills the sick room with a pleasant odour, and destroys disease germs in the air. Camphortar is equally destructive to Moths and other insects. Camphortar is used as a protection against Smallpox, Influenza, Fever, Epidemics, Cholera, and other infectious diseases.

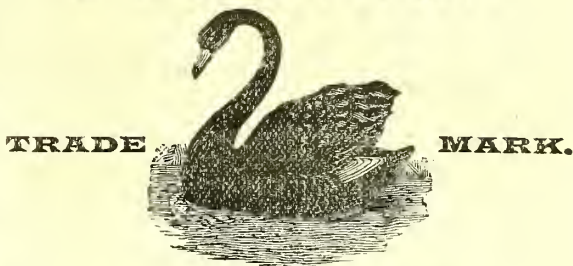
To be obtained of the following Wholesale Houses:—

London: Maw, Son & Thompson, F. Newbery & Sons, J. Sanger & Sons, May, Roberts & Co., Potter & Clarke, Hockin, Wilson & Co., W. Sutton & Co., Bourne, Johnson & Latimer. Liverpool: Ayrton & Saunders, Evans, Sons & Co. Manchester: Woolley, Sons & Co., Oldfield, Pattinson & Co., Heath Bros. Leeds: Simcock. Leicester: Howard Lloyd & Co.

MANUFACTURED ONLY BY

W. G. HEBDEN, Albany Works, HALIFAX, YORKSHIRE.

# CUMMINGS'



CYGNET BRAND

# EUCALYPTUS OIL,

Distilled from the leaves of Eucalyptus CNEORIFOLIA, formerly considered a sub-variety of *E. Oleosa*, but now classed as a distinct variety.

The Trade are invited to test this carefully prepared Oil, which since its recent introduction from Australia has won the unqualified approval of the leading British, American, and Continental Authorities.

Its purity, pleasant perfume, the unprecedentedly large percentage of crystallizable Eucalyptol it contains, and other good qualities, are deservedly gaining the preference of buyers.

Samples and Quotations on Application.

Sole Consignees—Wholesale only—

J. W. DRYSDALE & CO.

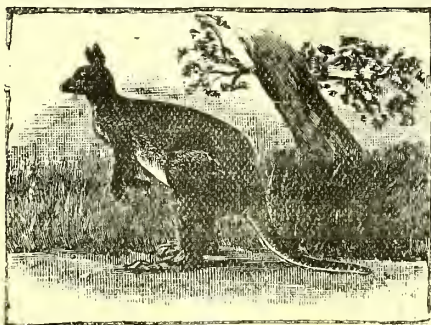
8 CREECHURCH LANE, LONDON, E.C.

# KANGAROO

# EUCALYPTUS OIL

25-lb. Tins.

KANGAROO



TRADE MARK.

25-lb. Tins.

BRAND.

Is admitted to be the Purest Eucalyptus Oil yet introduced to the public.  
To be obtained of your Wholesale Druggist.

SOLE CONSIGNEES—LAUGHLAND, MACKAY & BAKER, 50 Lime St., LONDON.

COLONIAL ADDRESS—A. M. BICKFORD & SONS, WHOLESALE DRUGGISTS, ADELAIDE,  
46 CURRIE STREET,





AND PRONOUNCED BY THE MEDICAL PROFESSION TO BE UNSURPASSED.

Extract from Analytical Report of Dr. S. Rideal, F.C.S., F.I.C., F.G.S.

"Practically tasteless and free from smell, contained no fat or resin, \* \* \* carefully manufactured."

**SNOWDON, SONS & CO., MILLWALL, LONDON, E.**

# PETROLINA

The Best and Most Reliable Paraffinum Molle.

**PRICES MUCH REDUCED.**

Sold in casks of 3 cwt., kegs of 1 cwt., 56 lbs., and 28 lbs., and in tins of 14 lbs., 5 lbs., and 1 lb.

Samples and Prices from any Wholesale Druggist, or, if not so procurable, write direct to the

**BINGHAMTON OIL REFINING CO.**

London Agency—3 COLEMAN STREET, E.C.

# WILEY'S CHEMICAL ESSENCE

FOR

## LAMENESS in HORSES

*A Genuine Remedy. Brings credit to all who sell it.*

**50 YEARS' UNBROKEN SUCCESS**

SOLE MAKER AND PROPRIETOR,

**FRANCIS E. ROOKLEDGE, CHEMIST,  
EASINGWOLD, YORK.**

TO BE HAD OF USUAL WHOLESALE HOUSES.

50

WHOLESALE & EXPORT orders for

## MASON'S

PERFUMED SOLUTION OF

# CARBOLIC ACID

Should be addressed to

**C. E. MASON & Co., 2 Beech St., LONDON, E.C.**

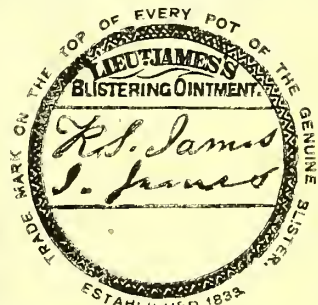
TERMS UPON APPLICATION.

ESTABLISHED 1833.  
**HORSES.—LIEUT. JAMES'S BLISTER.**

CAUTION.

The annexed Label is at the top of every Pot of the ORIGINAL and only GENUINE BLISTER.

The Messrs. Barclay & Sons, 95 Farringdon Street, London, and Messrs. Raines & Co., Edinburgh, are now and have been Agents 57 years.



**AGENTS**—Sutton & Co., 10 Bow Churchyard; W. Edwards & Son, 157 Queen Victoria Street; Newbery & Son, 37 Newgate Street; Evans, Lescher & Evans, Bartholomew Close; Burgoyne, Burlidges & Co., 16 Coleman Street; Lynch & Co., 171A Aldersgate Street; Sonthall Brothers and Barclay, Birmingham; R. Hovenden & Sons, 93 & 95 City Road, Finsbury; Sanger & Son, 150 Oxford Street; Millard & Sons, 40 Charterhouse Square; Corry & Soper, 59 Market Street, Manchester; Leadenhall Street, London; Woolley, Sons & Co., 59 Market Street, Manchester; Apothecaries Company, Virginia St., Glasgow; John Thompson, 68 Hanover Street, Liverpool; Boileau & Co., Ardee Street, Dublin; McMaster & Co., 121 & 122 Capel Street, Dublin; T. McMullen & Co. and J. Clarke & Co. (Lim.), Belfast; D. Galbraith, Londonderry; M. O. Delacoe Pharmacie Anglaise, Bruxelles.

And by all Chemists, in Pots, 1/6, 2/9, 5/-, 9/-, and 16/-.

**COLONIAL AGENTS**—MELBOURNE and WELLINGTON: Felton, Grimwade & Co.; SYDNEY, BRISBANE, and LAUNCESTON: Elliott Bros. & Co.; DUNEDIN and AUCKLAND: Kempthorne, Prosser & Co.; CALCUTTA: Smith, Stanistreet & Co.

**W. H. JAMES, SOLE MANUFACTURER, FARINGDON, BERKS.**

Advertised in "Bell's Life" 54 years. Beware of Spurious Imitations.



# BREFFIT'S FEEDING BOTTLES.

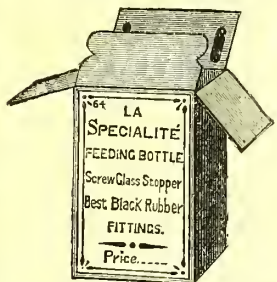
All fitted Screw Glass Stoppers, Black Seamless Teats, and 7½-inch best quality Black Rubber Tubes.



## INTERNATIONAL SERIES.

In Folding Card Boxes. Attractively Labelled.

				Without Brushes	With Two Brushes
No. 61	WHITE GLASS BOTTLE				
" 62	GREEN	"	"	42/-	46/-
" 63	WHITE	"	"	40/-	44/-
" 64	GREEN	"	"	43/-	47/-
				41/-	45/-



## "LA SPECIALITE" SERIES.

In Folding Card Boxes printed "La Specialite." Bottles and Boxes without manufacturer's name.

				Without Brushes	With Two Brushes
No. 65	WHITE GLASS BOTTLE				
" 66	GREEN	"	"	41/-	45/-
" 67	WHITE	"	"	39/-	43/-
" 68	GREEN	"	"	42/-	46/-
				40/-	44/-

FOR PRICES  
SHOP ROUNDS SEE  
LOWER DOWN.

## WHAT THE TRADE SAY.

### UNSOLICITED LETTER FROM A CHEMIST.

To E. BREFFIT & CO. (LIM.), 83 Upper Thames Street, London.  
Gentlemen, - Enclosed please find Cheque £20 12s. 8d. I may say I am exceedingly well pleased with my SHOP ROUNDS, both as regards Bottles and Labels. You will have another order soon, I think.  
38 High Street, Old Aberdeen, June 12, 1893.  
Yours truly,  
H. MILNE.

## HAND-MADE WHITE GLASS SHOP ROUNDS.

COMPARE OUR PRICES.	SIZES		2dr.	½	1	1½	2	3	4	6	8	10	12	16	20	24	30	32	40	60	80 oz.	SEND TRIAL ORDER.
	UNSTOPPERED, NARROW or WIDE.		7d.	7d.	9d.	9d.	11d.	1/3	1/4	1/9	2/	2/3	2/6	2/9	3/3	3/6	4/	4/	5/	6/3	8/8	
	NARROW, GROUND GLASS STOPPERED.		1/3	1/5	1/6	1/9	1/9	2/	2/3	2/8	3/6	3/9	4/	4/6	5/3	5/6	5/9	5/9	6/9	8/	10/6	
	WIDE, GROUND GLASS STOPPERED.		1/6	1/9	1/10	2/	2/	2/3	2/8	3/3	4/	4/3	4/6	5/3	5/9	6/	6/3	6/3	7/3	9/	11/	

PRICES PER DOZEN, NET CASH, DELIVERED FREE, LONDON.

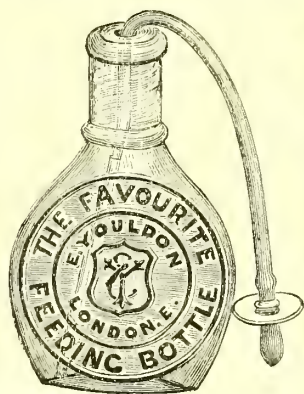
GOLD LABELLING on above, 3/- per dozen.

ENGRAVED LABELS on above, 4/6 per dozen.

SEND FOR OUR ILLUSTRATED PRICE LIST.

OFFICES AND SHOWROOMS, 83 UPPER THAMES STREET, LONDON, E.C.





# GLASS BOTTLES

OF EVERY DESCRIPTION.

Revised Price List on Application.

**FEEDING BOTTLES AT LOW RATES.**

Write for Prices of any kind of Bottle required to

## E. YOULDON,

East London Glass Bottle Warehouse,  
36, 38, & 40 GREAT GARDEN STREET, WHITECHAPEL, LONDON, E.



Telephone No. 1365.

Telegraphic Address—"FISH LONDON."

## THE BEST BOTTLES.

DEAR SIR,

[2]

If you want to replenish your Stock, } Send an  
If you want a New Shape Bottle, } inquiry to

Yours faithfully,

### JOHNSEN & JØRGENSEN.

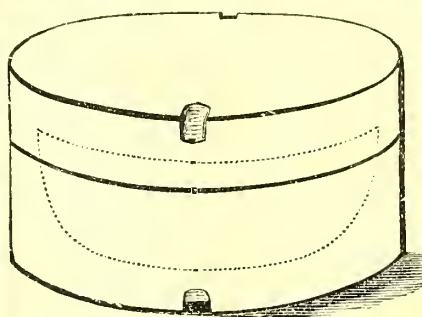
# WILLIAM TOOGOOD.

**TOOGOOD'S**

IMPROVED PATENT

## EARTHENWARE COVERED POTS

Are claimed to be the most perfect and convenient yet offered to the Trade.



Owing to the increasing demand for our Patent Pots, we have introduced a Special *THIN* Series for Dispensing.

These Pots are beautifully glazed and finished, and, being very light, are specially adapted for sending by post.

ORDINARY THICKNESS—

1 dr.	2 dr.	1/2	1/8	1/10	2 1/2	2	3	4	6	8 ounces.
1/8	1/6	1/6	1/8	1/10	2 1/2	2/3	2/10	3/8	4/6	5/6 per doz.

THIN FOR DISPENSING—

1/7	1/9	2/-	2 1/2	2/5	3/-	4/-	6/-	8 ounces.
								6/- per doz.

**TOOGOOD'S BATHING CAPS.** Write for New Season's List.

**TOOGOOD'S SPONGE BAGS.** Write for New Season's List.

**TOOGOOD'S FLESH GLOVES.** Write for New Season's List.

**TOOGOOD'S FEEDING BOTTLES.** Write for Special List.

**BURLINGTON BUILDINGS, HEDDON ST., REGENT STREET, LONDON, W.**



**GLASS BOTTLES**

GOOD AND CHEAP.

{ From Stock  
in London or  
direct from  
the works.

**THE NEW SHAPE FLATS,**  
With rounded edges, or the ordinary kind, plain or graduated.  
3 and 4 ounce .. .. 8/- per gross.  
6 and 8 .. .. 9/-

**WHITE MOULDED PHIALS.**

1/2 oz. 1 oz. 1 1/2 oz. 2 oz.  
3/6 .. 3/9 .. 4/6 .. 5/3 per gross.

**PANEL BOTTLES.**

2 oz. 4 oz. 6 oz. 8 oz.  
7/- .. 8/- .. 9/- .. 9/- per gross.

**SPECIAL NOTICE.**—Six gross and upwards of assorted sizes sent Carriage Free to any part of England. Smaller quantities not carriage paid. Sample Bottle sent free on application.

**I. ISAACS & CO., GLASS BOTTLE MANUFACTURERS,**  
Francis St., Tottenham Court Road, LONDON, W.C.  
Established 50 Years Bankers—London and Westminster Bank.

In Stock, upwards of 50,000,000 Articles.  
Any Special Articles made to order.

**TURNED WOOD BOXES, &c.**

\*3018 Box for Pills or Powders.

SIZE	TO HOLD	PER GROSS.
D ..	6 Pills	1/-
A ..	12 ..	1/6
C ..	24 ..	2/-
H ..	36 ..	3/-
V ..	Powder	8/-

REDUCED PRICES for Original Cases.

CONTRACTS to supply Manufacturers as required at specially low figures.

**MAXIME & CO., Wood and Bone Turners,**  
150 OLD STREET, LONDON, E.C.

Factories and Sawmills—Gothenburg, SWEDEN, and Boulogne, FRANCE.

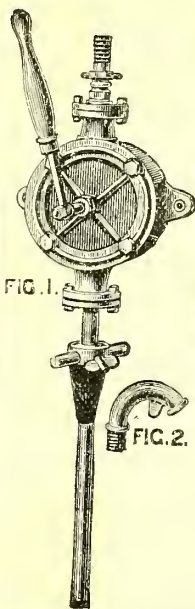


FIG. 1.



FIG. 2.

BUY THE BEST

**OIL PUMP**

AND SAVE

**OIL, TIME, MONEY.**

THOUSANDS IN USE.

We have bought the Stock of these Pumps from

**MESSRS. PONTIFEX & WOOD,**  
SHOE LANE, LONDON,

Who have given up this part of their business, and it is our intention to continue same.

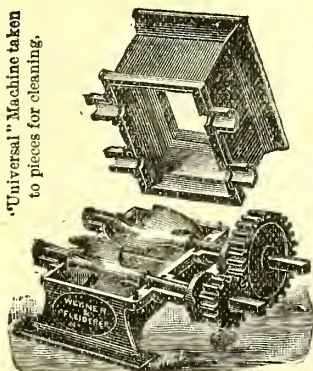
We hold a Good Stock, and can give Prompt Delivery.

Write for full particulars and prices of The "Farrington" Patent Oil Pumps to

**W. H. WILLCOX & CO.**

34 & 36 Southwark Street,  
**LONDON, S.E.**

"Universal" Machine taken to pieces for cleaning.



Size 3, Type I., for 1-lb. Mass.

**THE "UNIVERSAL"****Kneading & Mixing Machine,**

Used by all the largest Pill Makers.

SUITABLE ALSO FOR

ointments, powders,  
AND MASSES  
of any  
Consistency.

**PILL MASSING MACHINES.**

PILL  
PIPERS,

CUTTERS,

ROUNDERS, COATERS,

"SPIRAL BRUSH"

POWDER-SIFTERS

(WITH INTERCHANGEABLE SIEVES),

AND EVERY ACCESSORY FOR THE PILL ROOM.

**WERNER, PFLEIDERER & PERKINS (LIMITED),**  
43 Regent Square, GRAY'S INN ROAD, W.C.

SHOWROOMS:—117 QUEEN VICTORIA STREET, E.C.

Contractors to the War Offices of all the Great Powers & other Governments.

**NEW PATENT****AIR-TIGHT CHEMIST JAR.**

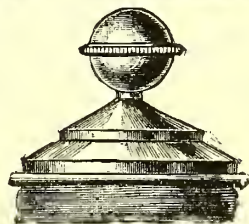
A slight turn of the knob presses the indiarubber Band against the glass, and renders the vessel absolutely air-tight. The Stopper is made of pure Nickel, of handsome shape.

INVALUABLE FOR SHOW BOTTLES, CHEMISTS, CONFECTIONERS, &c.

Samples and Prices of all Chemists' Sundries.

**C. MELIN,**

37 CRUTCHED FRIARS, MARK LANE, E.C.



Section of the Nickel Stopper when closed.

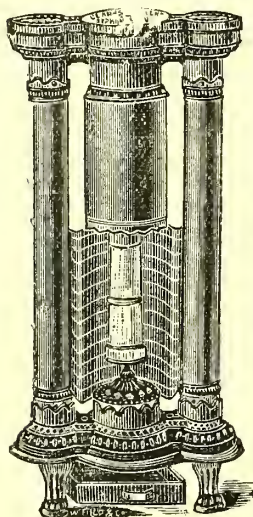


# TO CHEMISTS AND DRUGGISTS.

AGENTS WANTED FOR THE SALE OF  
**"THE SYPHON"** (REGISTERED TITLE) **HYGIENIC CONDENSING GAS HEATING-STOVES**  
**(CLARK'S PATENT).**

A Necessary for all Invalids. A Comfort to Everybody.

**NO FLUE REQUIRED. FREE FROM SMELL OR SMOKE.**



All injurious vapours are reduced to harmless liquid inside the Stove, and passed out at foot into a tray provided for that purpose.

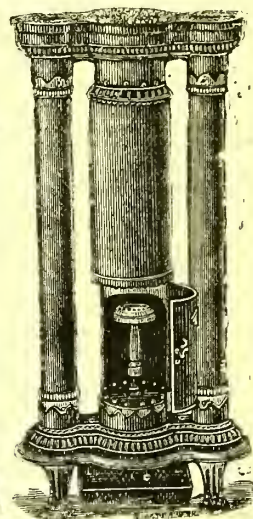
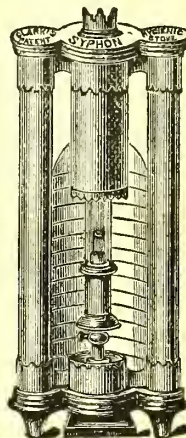
*For use in Hospitals, Sick Chambers, Bedrooms  
Halls, Conservatories, Schools, Shops, &c.*



They give a Pure, Equable, and Agreeable Heat, which can be graduated and sustained at the will of the user.

Specially suitable for patients suffering from Bronchial affections, as a moist atmosphere is obtainable when required.

*For Terms, Particulars, and Prices, apply to*



**S. CLARK & CO.,** Patentees and Makers, Syphon Works, Park Street, ISLINGTON, LONDON, N.

Telegraphic Address—"SYPHON STOVES LONDON." Wholesale Agents—Messrs. MAW, SON & THOMPSON, Aldersgate Street, London, E.C.

**WALKER, TROKE & CO.**

WHOLESALE DRUGGISTS,

5 Bath Street, City Road,

LONDON, E.C.



SOLE MAKERS OF  
**GABRIEL & TROKE'S  
GELATINE CAPSULED  
HORSEBALLS.**

Alterative, Condition, Cordial, Cough,  
Diuretic, Fever, Physic, Worm, Quinine  
Tonic Balls (Registered 81,291).

QUOTATIONS & SAMPLES FREE ON APPLICATION.

**GENUINE EMERY, EMERY CLOTH, AND BLACK LEAD.**

**JOHN OAKLEY & SONS,**

MANUFACTURERS OF

Glass and Flint Paper, Emery and Glass Cloth; Emery, Black Lead, Emery Wheels, Pumice, Putty Powder, Crocus, Urn Powder, Tripoli, Rouge, Plate Powder, Steel Polish, Furniture Polish, Knife Boards, Brunswick and Berlin Black, &c.

**OAKLEY'S WELLINGTON KNIFE POLISH**

Prepared expressly for Oakley's and other Knife Boards, Buff Leather Boards, and all the Patent Knife Cleaning Machines.  
Sold in Canisters with perforated Tops to prevent waste, at 1d., 2d., 3d., 6d., 1s., 2s. 6d., and 4s. each.

**OAKLEY'S NON-MERCURIAL SILVERSMITH'S SOAP,**

For Cleaning and Polishing Silver, Plate Glass, Marble, &c. Tablets, 6d. each.

**OAKLEY'S "POLYBRILLIANT" (REGISTERED).**

A Magic Pomade for Cleaning Brass, Copper, Tin, Pewter, Britannia Metal, &c. Never becomes dry and hard like other Metal Paste.  
Tins, 1d., 2d., 3d., and 6d. each.

**WELLINGTON BLOCK BLACK LEAD,**

In 1d., 2d., and 4d. Blocks, and 1s. Boxes.

**WELLINGTON EMERY & BLACK LEAD MILLS,** Westminster Bridge Road, London, S.E.

Highest Award and Prize Medal, Philadelphia Exhibition, 1876; and Boston, 1883. Gold Medal, Crystal Palace, 1884.



THIRD SEASON, 1893-4.

A UNIQUE APPLICATION OF KNOWN SCIENTIFIC FACTS.

Registered No. 160642.

Registered No. 160642.



**SOLPORT'S**  
**"FURFELT"**



# CHEST PROTECTORS

Are the result of a successful attempt to utilise as a protective covering for the Chest *the best non-conductor of heat known*, namely, *Coney Fur*.

By incorporating this fur by a new process with fine Undyed Lamb's Wool we have produced a material which is a scientifically perfect protection for the organs of the Chest against cold.

Since they are made from the warmest materials known, are so porous that a candle may be blown out through them, are non-absorbent, free from dye of any kind, soft as silk, perfectly washable, and of moderate price, they have been universally adjudged by the trade and its press

**"AN IDEAL CHEST PROTECTOR."**

INSIST ON OUR REGISTERED TRADE MARK AS HERE FIGURED.

	No. 0	1	2	3	4	5	6	
PRICES { Single ...	5/6	6/6	9/-	12/-	15/6	20/-	25/-	per doz.
Double ...	12/-	15/-	20/-	25/6	34/-	42/6	52/-	"
Vest Shape...	16/6	22/6	30/-	37/6	46/6	58/6	70/-	"

**SOLPORT BROS., 66 Shaftesbury St., New North Road, LONDON, N.**

AND OF ALL WHOLESALE HOUSES.



THE INHALANT

# "SPIRONE"

TRADE MARK.

FOR THE TREATMENT AND CURE OF ALL

## DISEASES OF THE LUNGS, WINDPIPE, NOSE & THROAT.

CLAIMS TO BE A

Specific for all Congestive and Inflammatory Conditions of the Respiratory Apparatus,

And will be found efficacious in

### INFLUENZA, COUGHS AND COLDS, ASTHMA, BRONCHITIS,

Inflammation and Congestion of the Lungs, Pneumonia, Pleurisy, Whooping Cough, Croup, Diphtheria, Pharyngitis, Laryngitis, Catarrh, Sore Throat, Quinsy, Enlarged Tonsils, Hoarseness, Loss of Voice, Colds in the Head, Hay Fever, and all other Complaints of the Respiratory Organs.

None Genuine except such as bear the above Trade Mark "SPIRONE" and the Signature of the Inventor upon the Bottles, on the Label over the Cork, and on the Wrapper.

Retail Price, 4s. 6d. and 11s. per Bottle. Set of Apparatus for Administration, 15s.

PAMPHLETS AND SHOWCARDS FREE ON APPLICATION.

**THE SPIRONE COMPANY, LIM.,** **DEPOT-** **285 REGENT STREET, LONDON, W.**



**DRUGGISTS' SUNDRY GOODS.**  
**HEATH BROS.,**  
 27 BLACKFRIARS STREET, MANCHESTER,  
 Being cash buyers can offer all lines at the very lowest prices.  
 WRITE FOR QUOTATIONS.

**BLAUD'S PILLS** (Best Quality, Soluble Coating).  
 10-gross Tins, carriage paid, for 4/6. Cash with order.  
 7-lb Tins (56 gross), carriage paid, for 21/-. Cash with order.  
**COMP. SULPH. LOZ. (Garrod's Formula) & TABLETS.**  
 4 lbs., carriage paid, for 4/-. Cash with order.  
 7 lbs., carriage paid, for 6/6. Cash with order.  
*SPECIAL QUOTATIONS FOR LARGE QUANTITIES.*  
**JAMES N. DAVIDSON & GRAY, CHEMISTS, DUNDEE.**

**COFFEE.**  
**THE "ORIGINAL CANISTER" & ROASTED COFFEES**  
 These Coffees have been before the Public for nearly 50 years,  
 and are the very best of their kind.  
**WHITE, FAIRCHILD & CO., 30 Gt. Tower St., E.C.**  
 ESTABLISHED 1847. AGENTS WANTED.

**BLAIR'S**  
**GOUT & RHEUMATIC PILLS**  
*Cure Gout, Rheumatism, Sciatica, Lumbago, Neuralgia.*  
 The **Excruciating Pain** is quickly relieved, and cured in a few days, by  
 these celebrated Pills, well known as the **Great Remedy** for the above  
 Complaints. **NO POISONOUS INGREDIENTS.**

  
**E. H. THIELLAY'S (Registered 1867)**  
**EUCALYPTIA.**  
 From "Eucalyptus Globulus." An authentic regene-  
 rator of the hair, instantly stopping its falling off, and is  
 invaluable for hairdressing; a safeguard in epidemic times,  
 protecting the respiratory functions from  
 malarious and vitiated emanations. In Bottles at  
 2/6, 3/6, 4/6, 7/-, 10/-, &c.  
 All Wholesale Houses, or direct from  
**E. H. THIELLAY**  
 Parfumeur-Chimiste, Amersham Park, New Cross, LONDON.  
 (SHOW ROOMS AT CHARING CROSS HOTEL.) (2)

**CINCHONA BARK & CRUDE DRUGS.**  
**SPECIALITIES OF**  
**FREDK. GRAF,**  
 DRUG MERCHANT,  
 65 FENCHURCH STREET, LONDON, E.C.  
 PRICES AND SAMPLES ON APPLICATION.

**S.V.R.** In 40-gallon returnable iron casks, pure tinned, with screw  
 bungs, interchangeable brass taps and spanners for opening.  
 Farina, Dextrine, Glucose, Alcohol absolut., Fusel Oil, Pear  
 Oil, Lime-Soda-Lead-Acetates, Verigris, Acetic Acid, Wood Naphtha,  
 Charcoal, Ammonia liquid 880-900, anhydrous Sodium Sulphide, Bromides,  
 Iodides, Chloralhydrate, Boracic Acid, Sulphate of Copper, Permanganate of  
 Potash, Ol. Caryophyll., Menth. Pip., Pini, Juniperi.  
**HUGO LORENZ, 7, 8 Idol Lane, LONDON, E.C.**  
 See also page 114, March 18 issue.

**OXONIA**  
 The New Lotion for Rodent Ulcer, Cancer of Tongue, Lips,  
 Lupus, Ringworm, Varicose Veins, &c.  
 Retail, 2/9 per Bottle. Trade, 23/- per dozen, subject.  
**THOMAS CHRISTY & CO., 25 Lime Street, LONDON, E.C.**

**PRECIPITATED CHALK,** WHITEST  
 PUREST.  
 CHEAPEST SELLERS IN THE MARKET.  
**ALSO CHEMICALS, DRUGS, AND OILS.**  
 APPLY TO  
**AUG. LEVERMORE & CO., 8 LIME STREET, LONDON, E.C.**

**EVERY CHEMIST**  
 SHOULD STOCK  
**HEALD'S DOG MEDICINES.**  
 They command a ready sale everywhere.  
 Address—**HEALD, BURNHAM, BUCKS.**

**NESS & COMPANY, DARLINGTON.**  
 Old-established Manufacturers and Exporters of Insecticidal, Disinfectant,  
 and Deodorising Preparations (Three Gold Medals for Excellence).  
 Will send to any address Particulars and Samples of their Powerful  
**SHEEP DIPS AND DISINFECTANTS.**  
 World's Fair, Chicago, Stand 293, British Section,  
 Manufactures Building.

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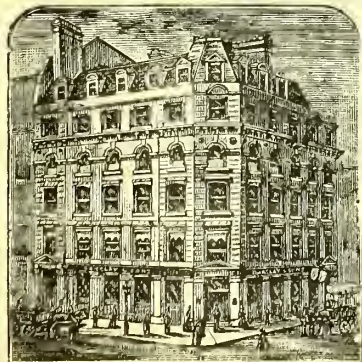


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